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Executive Summary

Located at the northern end of Port Phillip Bay, Hobsons Bay is home to such diverse and vibrant communities as Altona, Altona Meadows, Altona North, Brooklyn, Laverton, Newport, Seabrook, Seaholme, South Kingsville, Spotswood, Williamstown and Williamstown North.

Each of these communities has its own unique character, ranging from the historic seaport of Williamstown, with its range of heritage buildings, to the newer, fast-growing residential areas of Altona Meadows and Seabrook. Hobsons Bay’s rich natural environment is one of its greatest treasures. The area boasts over 20 kilometres of beaches and foreshore areas and is home to significant coastal wetlands, one listed under the Ramsar Convention, in recognition of its high value habitat for waterbirds, five creek systems, remnant native grasslands, and important flora and fauna habitats.

Hobsons Bay City Council provides waste and litter services to its community via kerbside collection services to households, community organisations and businesses, community education and engagement, litter collections, street sweeping, stormwater management, beach cleaning and seaweed removal.

Waste generation, a combined measure of landfill disposal of waste plus recycling activity, is an indicator of the overall level of waste activity within the economy. Waste generation, resource recovery, recycling and land filling are commonly discussed in terms of the three main waste sectors:

- municipal solid waste (MSW)—mainly household and council waste and some construction waste from owner/occupier renovations
- commercial and industrial (C&I) waste—business, educational institution and government (other than council) waste
- construction and demolition (C&D) waste—residential, civil and commercial demolition waste

Litter is the most visible sign of environmental pollution and the product of waste. Litter is defined by the Environment Protection Act 1970 as any solid or liquid domestic or commercial waste, refuse, debris or rubbish and, without limiting the generality of the above, includes any waste glass, metal, plastic, paper, fabric, wood, food, soil, sand, concrete or rocks, abandoned vehicles, abandoned vehicle parts and garden remnants and clippings (Environment Protection Act 1970, Victorian Law Today).

A review of the Council’s waste and litter management strategies and services was last undertaken by the Council in 2002. In recent years, Commonwealth and State Government policy directions have meant that local government will need to respond to these changes.

In 2010, a Waste and Litter Management Plan Issues Paper (Issues Paper) was developed that provided background, highlighted Commonwealth and State objectives at the time, established baseline data and provided recommendations for inclusion in the Council’s Waste and Litter Management Plan.
Since this time critical Commonwealth and State policy decisions have been made and operational changes undertaken by the Council that affect the management of waste and litter by the Council.

At a national level National Waste Policy has been developed and a National Litter Policy under development. State and Metropolitan waste policies are being reviewed. A State litter policy is in implementation phase. The Plan identifies the main objectives and actions of these higher government policies and aims to embed them into the Council’s longer term future while maintaining some flexibility to allow change and progress.

The Council’s Waste and Litter Management Plan (the Plan) has drawn from the Issues Paper, community consultation and Government policy and the Council’s operational changes and sets the future direction of waste and litter management for the municipality.

The Plan centres on the Council’s areas of responsibility and aims to implement achievable actions that will address the waste and litter management needs of the Hobsons Bay community for the next five years. The Plan addresses waste and litter that the Council has direct control over or influence on. This includes litter bin and dumped litter collections, litter traps, street sweeping, beach cleaning, household waste, garden waste, recycling and hard waste collections.

**Funding the Plan**

The Plan will be funded through the Council’s Environmental Management budget, predominantly made up of waste service charges and some contract income. The Waste Service Charge primarily funds household waste, garden waste, recycling and hard waste collections and disposal and processing services. This includes the management of these services. General rates fund litter bin and dumped litter collections, litter traps, street sweeping, beach cleaning.

The Council’s Recyclables Contract began on 6th June 2011 accruing an annual income of approximately $500,000 per year. This will fluctuate according to amount of recyclables collected. The contracted rate is a set for the initial contract term and does not fluctuate with market changes or CPI. The contract also makes an allowance of $50,000 per year for recycling education programs.

To implement the proposed activities and address possible future implications it is proposed that the Recyclables Contract income will be utilised to fund initiatives. This will include the use of a financial reserve (Sinking Fund) to ensure agreed action programs over the five year period can be implemented incrementally.

External funding will sought when it becomes available to assist in the delivery of actions and directions identified in the Plan.

There are many actions identified in the Plan, and the Council will need to plan activities over the next five
years taking into consideration financial and personnel resources available. The Council will therefore develop an annual action plan that is achievable and realistic and takes into account short and long term priorities.

**Reporting on and evaluating the Plan**

Reporting on the Plan will be on an annual basis and an action plan will developed each year for the forthcoming financial year and approved by the Council’s Corporate Management Team.

The Plan will be reviewed at the end of its five year term and a new plan for the next five years developed.

At the time of the Plan’s development, National, State and Metropolitan policy directions are being reviewed, legislation developed and programs implemented. These will inform local government responses to waste and litter management. As policy, legislation and programs are implemented at National, State and Metropolitan levels that have significant impact on or opportunity for the Council and its community, they will be assessed by the Council and a response sought through the Council’s reporting cycle. This will ensure that the Council is responsive and the Plan is flexible to the needs at the time.

**Summary of actions**

The following is a summary of key actions within the Council’s area of influence, in the municipal waste and litter sector, that are identified throughout the Plan as “Action Items” and with the following symbol:

The actions are not listed accordingly to priority, nor have been timetabled within the next five years. The Council will assess personnel and financial resources to achieve the actions and develop an annual action plan that is achievable and realistic for each year of the plan.

<table>
<thead>
<tr>
<th>Action number</th>
<th>Action description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Australian Government - Product Stewardship Bill 2011/Electronic Waste</strong> - Develop a business case for an electronic waste recycling service based on a trial/pilot, benchmarking and other research for consideration and future implementation. Advocate for the development of an e-waste facility in Melbourne’s west, that is conveniently located for Hobsons Bay residents</td>
</tr>
<tr>
<td>2</td>
<td><strong>Victorian Government – Environment Protection Authority – Landfill Levy</strong> - The Council should advocate, independently or collectively with other Councils, to the State</td>
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<td>Action number</td>
<td>Action description</td>
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<tr>
<td></td>
<td>Government and Metropolitan Waste Management Group (MWMG) to invest in resource recovery providing funding from the landfill levy and review the landfill levy to ensure the carbon costs of waste are not double counted in the Carbon Price.</td>
</tr>
<tr>
<td>3.1</td>
<td>The Council should advocate to the State Government and MWMG to undertake bin composition audits at Victorian and metropolitan level and consider its own auditing of local activities.</td>
</tr>
<tr>
<td>3.2</td>
<td>Actively contribute to the review and development of the Victorian Waste Policy.</td>
</tr>
<tr>
<td>3.3</td>
<td>Review new targets and strategies established under the Victorian Waste Policy and consider their adoption.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Victorian Government - Sustainability Victoria/Metropolitan Waste Management Group</strong></td>
</tr>
<tr>
<td>4.1</td>
<td>Victorian Advanced Resource Recovery Initiative (VARRI) – advocate to the MWMG and State Government for further research into Alternative Resource Recovery Technologies be conducted by the State, to enable effective long term planning and localised collection service reviews that accommodate future waste technology advances. Alternatively the Council should seek to collaborate with other councils on similar research.</td>
</tr>
<tr>
<td>4.2</td>
<td>Develop options and consider implications for food waste recovery from the garbage stream, public place recycling from litter bins, seaweed, street sweepings and stormwater.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Victorian Government - Sustainability Victoria - Detox your home</strong> - Actively seek to establish a permanent ‘Detox Your Home’ facility within the bounds of the municipality, a more regular mobile service or partnership with a local chemical recycling company.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Metropolitan Waste Management Group (MWMG)</strong></td>
</tr>
<tr>
<td>6.1</td>
<td>The Council will actively encourage the MWMG to plan for more facilities to process garden waste with options for food waste, seaweed and street sweepings.</td>
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<td>Action number</td>
<td>Action description</td>
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<tr>
<td>6.2</td>
<td>Continue to actively participate in the MWMG Local Government Forum and Local Government Waste Education Network, represent Local Government and the Council on the Technical Advisory Reference Group (TARG) for a two year membership term.</td>
</tr>
<tr>
<td>7</td>
<td><strong>MWMG Regional tenders and contract</strong> - The Council will locally implement the regional North West Organics Processing and Landfill service contracts, including actively participating in regional user group activities.</td>
</tr>
<tr>
<td>8</td>
<td><strong>The Council’s Waste Management Service</strong></td>
</tr>
<tr>
<td>8.1</td>
<td>Until technology becomes available and research concludes best practice approach to municipal waste services, the Council should continue to provide weekly 120 Litre garbage, fortnightly 240 Litre recycling and fortnightly 120 or 240 Litre garden waste collections, looking for service improvements in each new tender. Including options for tenderers to provide proposals for food waste collections and services to commercial properties and multi unit developments.</td>
</tr>
<tr>
<td>8.2</td>
<td>Continue to provide an annual booked hard waste collection service available to households once per financial year and continue to review reuse and recycling opportunities during each retender.</td>
</tr>
<tr>
<td>8.3</td>
<td>The Council should with State, MWMG and other Councils develop waste avoidance programs targeting municipal waste.</td>
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<tr>
<td>8.4</td>
<td>Bin colour standardisation – assess future guidelines or standards and their application and impact to the Council.</td>
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<tr>
<td>8.5</td>
<td>The Council should work with the MWMG and service providers, to reduce contamination in recycling and garden waste collections developing a community education and enforcement program.</td>
</tr>
<tr>
<td>8.6</td>
<td>Continue to undertake audits of recyclables collected in vehicles and seek to undertake audits for garden waste and garbage collection vehicles.</td>
</tr>
<tr>
<td>9</td>
<td><strong>The Council’s Waste Management Service Community Local Law</strong> - Continue and enforce waste service related enforcement. Seek to improve and refine these local laws and internal processes as part of any local law review.</td>
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<td>Action number</td>
<td>Action description</td>
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<tr>
<td>10</td>
<td>The Council’s Waste Management Service to non residential properties and multi unit developments.</td>
</tr>
<tr>
<td>10.1</td>
<td>Continue to provide municipal waste service to community facilities such as aged and child care, schools, churches, community centres and recreational centres. Establish with greater accuracy the number of services provided to community facilities and review types of services to these facilities. Develop a waste services policy that reflects review findings.</td>
</tr>
<tr>
<td>10.2</td>
<td>Consider altering the day of collection of commercial cardboard to a weekday, consulting service users prior to implementation. Establish with greater accuracy the number of services provided to commercial properties. Investigate alternate municipal waste service for commercial properties (existing and potential). Research and develop Options and Issues Paper including a waste charge scheme specific to this service. Scope the project including consultation with existing municipal waste service users and undertaking possible trials.</td>
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<tr>
<td>10.3</td>
<td>Investigate alternate municipal waste services for multiunit developments (existing and potential), including a waste charge scheme specific to this service. Develop clearer Council policy and guidelines to demonstrate its needs to the development community.</td>
</tr>
<tr>
<td>11</td>
<td>The Council’s Waste Management Service Waste reduction and resource recovery initiatives</td>
</tr>
<tr>
<td>11.1</td>
<td>Research and develop Options and Issues Paper on a food waste recovery service.</td>
</tr>
<tr>
<td>11.2</td>
<td>Research and develop Options and Issues Paper on the Council’s optional garden waste service.</td>
</tr>
<tr>
<td>11.3</td>
<td>Research and develop Options and Issues Paper on smaller garbage bins and larger recycling bins.</td>
</tr>
<tr>
<td>11.4</td>
<td>Research and develop Options and Issues Paper for other services such as day after collections, Reverse Garbage Centre.</td>
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<tr>
<td>11.5</td>
<td>Research and develop options including community engagement and enforcement to improve the quality of garden waste collected in the municipal waste service. Work with</td>
</tr>
<tr>
<td>Action number</td>
<td>Action description</td>
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<tr>
<td></td>
<td>the garden waste processing contractor to improve recycling quality of garden waste and increase diversion from landfill.</td>
</tr>
<tr>
<td>11.6</td>
<td>Participate in the metropolitan waste management group “Improving kerbside recycling program”.</td>
</tr>
<tr>
<td>11.7</td>
<td>Work with the recyclables processing contractor to improve recycling quality and increase diversion from landfill, developing an annual community recycling education and improvement program.</td>
</tr>
<tr>
<td>12</td>
<td><strong>The Council’s Waste Management Service – Community Engagement and education</strong> - continue to provide community engagement and education on waste avoidance and recycling initiatives.</td>
</tr>
<tr>
<td>13</td>
<td><strong>The Council’s other waste services</strong></td>
</tr>
<tr>
<td>13.1</td>
<td>Review the lighting recycling program, including consideration of other venues/service providers through an expression of interest process.</td>
</tr>
<tr>
<td>13.2</td>
<td>Consider and develop sustainable event guidelines.</td>
</tr>
<tr>
<td>14</td>
<td><strong>The Council’s own waste management from its facilities</strong> - Continue to lead by example continuing the Waste Wise program, EcoBuy program, Environmental Purchasing policy implementation and Hobsons Bay Environment Action Team (HEAT) and encouraging materials reduction, reuse and recycling in the Council’s projects.</td>
</tr>
<tr>
<td>15</td>
<td><strong>The Council’s litter management service</strong> - Continue to provide current levels of litter management services actively seeking resource recovery opportunities for recycling the litter collected including seaweed, street sweepings, stormwater traps and litter bin waste.</td>
</tr>
<tr>
<td>16</td>
<td><strong>The Council’s Litter Management Service Community Local Law</strong> - Continue and enforce building site litter and general litter enforcement. Seek to improve and refine these local laws and internal processes during any local law review.</td>
</tr>
<tr>
<td>17</td>
<td><strong>The Council’s Litter Management Service – Community Engagement and education</strong></td>
</tr>
<tr>
<td>Action number</td>
<td>Action description</td>
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<tr>
<td>17.1</td>
<td>Continue to plan and implement the Council’s annual Clean Up Australia Day event and support to community registered events.</td>
</tr>
<tr>
<td>17.2</td>
<td>Review current, past and best practice programs targeting cigarette butts.</td>
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<tr>
<td>17.3</td>
<td>Implement the Warmies Litter Reduction Program through community engagement, education, enforcement and a review of infrastructure related to littering behaviours such as signage and bins. Review the ongoing effectiveness of the program.</td>
</tr>
<tr>
<td>18</td>
<td><strong>The Council’s Public Place Recycling</strong> - Review the Public Place Recycling trial including benchmarking and consideration of Alternative Resource Recovery Technologies.</td>
</tr>
<tr>
<td>19</td>
<td><strong>Funding the Plan</strong></td>
</tr>
<tr>
<td>19.1</td>
<td>The Recyclables Contract income shall be utilised to fund initiatives, programs and research identified in the Plan.</td>
</tr>
<tr>
<td>19.2</td>
<td>A financial reserve (Sinking fund) is proposed whereby part of the recyclables contract income is set aside each year to address future waste management programs and initiatives.</td>
</tr>
<tr>
<td>19.3</td>
<td>Funds from the Recyclables Contract Income remaining at the end of each financial year shall be invested into the financial reserve for future allocation to waste management programs and initiatives.</td>
</tr>
<tr>
<td>20</td>
<td><strong>Evaluating and Reporting on the Plan</strong> - Develop an annual action plan that is achievable and realistic and takes into account short and long term priorities</td>
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</table>
Background

What is Waste and Litter?

It is important to distinguish between waste and litter to develop management initiatives. Although litter and waste are both products of consumption, and the overall aims of a relevant management plan may be quite similar, they require different approaches to adequately achieve those aims.

Waste is defined by the Environment Protection Act 1970 as any matter, whether solid, liquid, gaseous or radioactive, which is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration of the environment (Environment Protection Act 1970, Victorian Law Today).

Waste is the non-consumable element of everything we buy and use. It is generated in our kitchens and our backyards, in our businesses and each time we throw something away. Waste, rather than litter, is all rubbish generated by every Australian, whether or not it is disposed of in a considered manner.

Litter is the most visible sign of environmental pollution and the product of waste. Litter is defined by the Environment Protection Act 1970 as any solid or liquid domestic or commercial waste, refuse, debris or rubbish and, without limiting the generality of the above, includes any waste glass, metal, plastic, paper, fabric, wood, food, soil, sand, concrete or rocks, abandoned vehicles, abandoned vehicle parts and garden remnants and clippings (Environment Protection Act 1970, Victorian Law Today).

Litter is used and unwanted items that are not disposed of in an appropriate manner. Litter includes cigarette butts, food wrappers and empty bottles in parks, streets and beaches. It is the rubbish left on train station platforms and furniture left on nature strips.

In the context of this Plan, waste and litter arises from municipal or residential activities consistent with the Environment Protection Act 1970. It includes waste and litter collected by, or on behalf of, the Council, but does not include any industrial waste and most commercial waste (Environment Protection Act 1970, Victorian Law Today). This Plan also does not completely address construction and demolition waste but addresses it in the context of the Council’s local planning and waste policies.

Waste collected by, or on behalf of the Council, includes municipal kerbside solid waste via the collection of garbage, recycling, garden waste and hard waste from households and some commercial and community properties. It also includes municipal litter collection services from housing commission properties, litter bins, dumped litter, street sweeping, beach cleaning and litter trap clearing. Solid waste is non-hazardous, non-prescribed solid waste materials and includes putrescible and solid inert waste. Putrescible waste is waste that readily decomposes and includes food and garden waste and leaf litter from street sweepings. Solid inert waste is waste that does not readily decompose and includes waste collected in hard waste services or from dumped rubbish.
Why is Hobsons Bay City Council preparing a Waste and Litter Management Plan?

Local government plays a key role in managing waste and litter. Local government delivers household waste collection and recycling services, manages and operates landfills and provides education and awareness programs. Local government manages litter by providing litterbins, litter traps, street and beach cleaning and coordinating litter prevention programs.

Ongoing research, policy changes and improving technologies require local government to continually review their current operational and strategic plans. The Plan will address current and future direction of waste and litter management.

Specific objectives of the Plan are addressed in further sections.

Roles of the Council in waste and litter management

The different roles that Hobsons Bay City Council occupies in waste and litter management are:

- Direct service provision
- Advocacy and lobbying
- Education and community engagement
- Provision and management of local infrastructure
- Local planning and development
- Enforcement of local laws
- The Council’s waste management at its facilities

The Council’s role and responsibilities regarding waste and litter are limited to municipal solid waste and litter. It provides direct waste and litter services and maintains a depot to operate litter management services from. The Council has a role to engage and educate all sectors of the community to reduce waste and litter with particular focus on householders. Local Laws focus on appropriate management of waste and litter within all sectors.

The Council’s operations do not extend to managing construction and demolition waste nor the management of operating landfills. It does have a role in local planning policies relevant to development and the use of resources during construction, demolition and use of land. The Council’s role within the commercial and industrial sectors is limited to those businesses utilising the Council’s municipal waste services.
History of Waste and Litter Management Planning at Hobsons Bay


An Issues Paper was prepared in 2010 and reviewed policies, strategies and programs that reflected current and future litter and waste management priorities at the time. Since this time critical Commonwealth and State policy decisions have been made and operational changes have been undertaken by the Council that affect the Council’s management of waste and litter.

These include the following:

- The adoption of a National Waste Policy in November 2009 and corresponding implementation plan in July 2010.
- The adoption of the National Product Stewardship Bill in June 2011. A national regulated scheme has been developed that will first focus on television and computer recycling.
- The ongoing increase in the landfill levy with an unexpected $4 per tonne increase announced by the State Government in May 2011 above what was expected by local government and prior to the Council’s budget preparation.
- The Environment Protection Authority (EPA) Victoria’s introduction of the Best Practice Environmental Management - Siting, Design, Operation and Rehabilitation of Landfills (Landfill BPEM).
- The announcement of the Carbon Price.
- New Council recycling processing and regional garden waste processing contracts.

These are discussed further in section on “Government Roles and Responsibilities”. The Plan reflects on information provided in the Issues Paper and updates relevant information.

It is important to note that at the time of the Plan’s development, National, State and Metropolitan policy directions were being reviewed, legislation developed and programs implemented. These will inform local government responses to waste and litter management. The Plan will be monitored on an annual basis, an annual action plan developed and the Plan reviewed at the end of its five year term. As policy, legislation and programs are implemented at National, State and Metropolitan levels that have significant impact on or opportunity for the Council and its community, they will be assessed by the Council and a response sought through the Council’s reporting cycle. This will ensure that the Council is responsive and the Plan’s Action Plan is flexible to the needs at the time.
Community Consultation on the Issue Paper

Community consultation was undertaken through the development of the Issues Paper which was available to the public from 18th February to 1st April 2010. A community open evening was held on 24th March 2010 where individuals could meet with officers responsible for waste and litter management in the Council. The Council’s Sustainable Environment Advisory Group (SEAG) was also briefed on 1st October 2009 and 25th February and updated throughout 2010, 2011 and 2011.

Two submissions to the Issues Paper were received with the following suggestions:

- Litter enforcement should be strengthened.
- Encourage material reduction and reuse in the Council’s projects.
- Reduce localised impacts of processing waste generated by the community such as those in Brooklyn where garden waste is processed.
- Support to review recycling services to businesses.
- Focus on waste avoidance and reduction initiatives with mention of specific programs to change purchasing and disposal behaviours and composting programs, altering the cultural mindset of the disposer and a focus on local food production.
- The investigations technologies for treatment of the garbage stream and food waste recovery into other materials or energy recovery.
- Separation of hard waste products in hard waste collection services into reusable, recyclable and disposable items.
- Seaweed recycling.
- Public notices on litter bins.
- Support for ‘Detox Your Home’ and electronic waste recycling facilities.
- Advocacy for appropriate insurance claims decision processes for motor vehicle waste that consider the environmental impacts and not just the financial ones.
- Highlighting the need to develop a peak oil contingency plan to minimise the risk to waste management services.
- Investigate a ‘tip shop’ for Hobsons Bay.
- To include Transitions Hobsons Bay in the Living Green in Hobsons Bay Guidebook.

With respect to Public Place Recycling one submission suggested continuing to peruse Public Place Recycling as policy and cost benefits improve while the other suggested the money be better spent on other initiatives “until reasons that prevent people using the services are better understood and
addressed”.

Feedback from SEAG was positive with particular focus on a local solution for electronic waste recycling and waste reduction initiatives.

Feedback has been considered in the Plan. Specific waste avoidance, reduction, and home composting suggestions will be considered at appropriate programming stages.

Some initiatives suggested have been implemented since the Issues Paper, such as the recycling of hard waste, seaweed recycling, and advocacy for the investigation of state wide technologies of the garbage stream and food waste recovery into other materials or energy recovery.

Home composting and local food production, incorporating workshop activities, has been incorporated into the Council’s My Smart Garden Program. Transitions Hobsons Bay along with other community groups involved in environmental initiatives are mentioned in the in the Living Green in Hobsons Bay Guidebook.

The Council has and will continue to work with the community and the Environmental Protection Authority (EPA) to reduce localised impacts of processing waste generated by the community such as those in Brooklyn where garden waste is processed. The Council has also been involved in tenders to look at alternative technologies for the management and location of garden waste processing plants. These initiatives are described further in the Plan.

With respect to advocacy towards motor vehicle insurance claims processing this is not on the Council's or MAV’s agenda and does not appear to be a State Government’s priority at this time. The Council will consider this as a separate issue in future action plans.

With respect to peak oil contingency planning and risk to waste management services, the Council is developing a Community Greenhouse Action Plan (the GAP) that will provide a pathway toward reaching the Council’s community goal of zero net emissions by 2030. The GAP will include an implementation plan and identify those additional and/or related actions necessary to be undertaken to reach the Council’s community goal. Should the need for a Peak Oil Contingency Plan be identified as a priority action, consideration will be given to its development.

Managing Waste and Litter now and into the future

For the Plan to be successful the Plan needs to focus on the present waste and litter management needs of the municipality’s community whilst preparing the Council for potentially wide-ranging change in Australian waste and litter management.

There are many challenges to overcome to deliver improved resource recovery and waste and litter management in Hobsons Bay. The Issues Paper and the Plan, were collated at a time of increased waste
and litter policy development at National, State and Metropolitan levels. Waste and litter management in Hobsons Bay will continue to be shaped by policy and research at higher levels of government.

For example in addition to those policy and operational changes mentioned in the section titled “Government Roles and Responsibilities”, activities that may have impact on waste and litter management and future plans will include the following:

- In May 2011 the State Government began a strategic review of Sustainability Victoria to align the organisation with broader Government priorities. The outcomes will be presented to the Minister for Environment and Climate Change in August 2011.
- In July 2011, a review of the Sustainability Fund Priority Statement and allocation of landfill levy funding.
- In July 2011, a review by the Minister for Environment and Climate Change of the Metropolitan Waste Management Group (MWMG).
- In July 2011, the EPA’s and Department of Sustainability and Environment’s review of the statutory policy framework State environment protection policies (SEPPs) and Waste Management Policies (WMPs) - under the Environment Protection Act 1970.
- The uncertainty of the State Government’s Victorian Advanced Resource Recovery Initiative (VARRI) and future similar research.
- The Victorian Auditor General’s performance audit into Municipal Solid Waste Management (June 2011)
- The review of the Metropolitan Waste and Resource Recovery Strategic Plan by the Metropolitan Regional Waste Management Group.

State, regional or local research will also influence the location, nature and associated costs of waste treatment facilities and collection methods employed across Melbourne and Victoria. Of note is the Victorian Advanced Resource Recovery Initiative (VARRI) project, the $10 million Victorian Government initiative aimed at improving organic (food and garden) waste recovery in metropolitan Melbourne. The findings of the VARRI project were to influence the future of waste and litter management in the Melbourne metropolitan region particularly with respect to collection and treatment processes as an alternative to landfilling and recovery of food waste. A business case was to be developed as part of the process. Key learning’s of VARRI were released in March 2012 but due to the change in Government details of the business case are yet to be realised.

In light of these developments, the Council’s Waste and Litter Management Plan focuses on:

- Informing and educating the community of developments in waste and litter management.
• Equipping the Council with the necessary information and skills to manage the changing nature of waste and litter management.

• Adapting to National, State and Metropolitan policy changes and opportunities.

• Researching and developing services and programs that respond to waste and litter issues and community need, which are financially viable and environmentally sound.

• Establishing strong, ongoing relationships with relevant stakeholders, including Commonwealth and State Governments, Hobsons Bay residents, businesses, community groups, service providers and other Councils.

The Plan centres on the Council’s areas of responsibility and aims to implement achievable actions that will address the waste and litter management needs of the Hobsons Bay community for the next five years. The Plan addresses waste and litter that the Council has direct control over or influence on. This includes litter bin and dumped litter collections, litter traps, street sweeping, beach cleaning, household waste, garden waste, recycling and hard waste collections.

Priorities in waste and litter management within Hobsons Bay in the coming years were outlined in the “Key Recommendations” section of the Issues Paper. The Plan has been developed from the Issues Paper, community consultation outcomes and policy and operational changes since the Issues Paper was developed.

The Plan will be monitored on an annual basis, an annual action plan developed and the Plan reviewed at the end of its five year term.

Why is it important to manage waste and litter? The Environmental, social and financial implications of waste and litter management.

Australia is one of the highest waste generating countries in the world per head of population. Victoria ranks behind New South Wales and Queensland as the third largest contributor of solid waste. Population growth and increasing consumerism have led to increasing solid waste being generated, as our demand for products and services grows (Victorian Auditor-General’s Report, Municipal Solid Waste Management, June 2011).

Action to reduce waste and litter, either by reducing the generation of waste, or enabling the recovery and reuse of discarded material is a critical element of sustainable development. Land filling waste means an overall reduction in land available for other purposes and can cause pollution of soil, ground and surface water. Landfills produce flammable and greenhouse gases including methane, which has a global warming potency of 21 times more than carbon dioxide.

Dust, odour, litter and pests from land filling also pose health and safety risks for nearby communities.
Litter, the product of waste is visually unappealing, harms local fauna, pollutes water ways and impacts the way we live in and feel about a place.

Waste and litter services contribute to jobs growth. At a National level, in 2008, waste management and recycling directly employed almost 29,000 people (22,243 in recycling and 6,695 in land filling) and indirectly 24,308 (18,684 in recycling and 5,624 in land filling). Recycling provides 9.2 jobs per 10,000 tonnes of waste recycled, whereas landfill disposal provides 2.8 jobs per 10,000 tonnes of waste land filled (Environmental Protection and Heritage Council, National Waste Policy Overview, 2009).

With respect to greenhouse gas emissions, in an Australian context, approximately three to four per cent of total greenhouse gas emissions have been credited to waste. The organic component of solid waste, comprising food and garden waste is the lead contributor (Victorian Auditor-General’s Report, Municipal Solid Waste Management, June 2011).

In 2009/2010, the Council’s municipal waste accounted for approximately 71 per cent of the Council’s total greenhouse emissions with 52.3 per cent household garbage sent to landfill, 18.8 per cent garden waste composted and 0.8 per cent of the Council’s corporate waste that was land filled and recycled (Hobsons Bay City Council 2008/2009 and 2009/2010 Carbon and Water Inventories, December 2010).

The cost of municipal kerbside solid waste management to Victorian Local Government in 2008/2009 was $270 million, an increase of nearly $11 million or 4.4 per cent from the previous year (Sustainability Victoria, Victorian Local Government Annual Survey, 2009-2010).

The total cost of litter and street sweeping maintenance for Victorian Local governments in 2008-2009 was over $78 million, comprising $28 million on litter bin, litter traps and dumped rubbish collection services and almost $50 million on street sweeping (Sustainability Victoria, Victorian Local Government Annual Survey, 2009-2010).

Waste is a growing issue. As demand for products and services increase Australians produce more waste than they did the year before. Each year an increasing percentage of all waste produced is recycled. However, it is important to be aware that increasing recycling and reducing the total amount of produced waste is the key to combating a large environmental concern.

The Waste Minimisation Hierarchy and Litter Management Framework

Whilst recycling is an important step, avoiding waste is the first step can lead to greater gains, including the more efficient use of materials. Hobsons Bay City Council encourages its community to apply the waste minimisation hierarchy shown in Figure 1 when making consumption decisions.
The accepted industry and government framework to change littering behaviours is through education, enforcement and infrastructure (Figure 2). All three elements must be in place and be complementary. They need to be relevant to local conditions and must include incentives, communication and evaluation.

Figure 1: Waste Minimisation and Resource Recovery Hierarchy (Source: EPA Victoria website, March 2012)

Figure 2: Victorian Litter Strategy: elements of litter behaviour change (Source: Creating Cleaner, Safer Places - Working together to remove litter from Victoria's environment, 2009)
Objectives of this Plan

Ongoing research, policy changes and improving technologies require local government to continually review their current operational and strategic plans. The Council’s Plan will address current and future direction of waste and litter management.

The Objectives of this Plan are as follows:

- To inform the community and present the status quo of waste and litter management in Hobsons Bay and Victoria and provide some National context.
- To identify gaps and opportunities in local waste and litter management and planning and aim to address these through research, advocacy and development and implementation of sustainable and financially viable solutions.
- To reduce waste production and littering and increase resource recovery of the Council and its community, in the most sustainable and economic way.
- Ability to adapt to National, State and Metropolitan Policy directions.
- To focus on the Council’s areas of responsibility and direct control in the area of waste and litter management and maximise its efforts and resources in this space.

Policy and Program Review

Of all levels of government, local government has the most ‘hands-on’ involvement with waste and litter management. Each level of government has responsibilities for ensuring environmental sustainability into the future. These are governed by legislation and policies developed at a National and State Level and include the following:

- National Environment Protection Council Act, 1994
- Victorian State Government’s Creating Cleaner, Safer Places - Working together to remove litter from Victoria’s environment, 2009

Figure 3 below illustrates how the main legislation, policies and strategic plans by various agencies of government integrate with the Plan.
The following sections summarise the policy that drive waste and litter management at a local level. It also summarises key National or State legislation and programs that have influenced or will influence the Council’s waste and litter management.

Figure 3: Legislation, Policies and Plans (Source: adapted from the Metropolitan Waste Management Group’s (MWMG) Template for a Waste Management Strategy)
National, State and Metropolitan policy directions continue to be reviewed, legislation developed and programs implemented. These will inform local government responses to waste and litter management. The Plan will be monitored on an annual basis, an annual action plan developed and the Plan reviewed at the end of its five year term. Policy, legislation and programs that are implemented at National, State and Metropolitan levels that have significant impact on or opportunity for the Council and its community, will be assessed by the Council and a response sought through the Council’s reporting cycle. This will ensure that the Council is responsive and the Plan is flexible to the needs at the time.

**Government Roles and Responsibilities**

**Australian Government**

**A National Waste Policy – Managing Waste to 2020**

The Australian Government, in conjunction with the Environment Protection and Heritage Council (EPHC), comprising Ministers from Commonwealth, State and Territory Governments, the New Zealand Government, and the Papua New Guinea Government, has developed a waste policy for Australia. The National Waste Policy was agreed to by all Australian environment ministers in November 2009 and endorsed by the Council of Australian Governments. The National Waste Policy Implementation Plan was endorsed by the Environment Protection and Heritage Council on 5th July 2010. The implementation plan identifies priority initiatives and milestones, presents the governance arrangements that will support the Environment Protection and Heritage Council and sets out how progress will be tracked and performance monitored.

The National Waste Policy sets the direction for Australia to 2020 to produce less waste for disposal and manage waste as a resource to deliver economic, environmental and social benefits.

The aims of the National Waste Policy are to:

- avoid the generation of waste, reduce the amount of waste (including hazardous waste) for disposal
- manage waste as a resource
- ensure that waste treatment, disposal, recovery and re-use is undertaken in a safe, scientific and environmentally sound manner, and
- contribute to the reduction in greenhouse gas emissions, energy conservation and production, water efficiency and the productivity of the land

The National Waste Policy establishes a work program for national coordinated action on waste across six key areas:
• Reducing hazard and risk
• Tailoring solutions
• Providing the evidence
• Taking responsibility
• Improving the market
• Pursuing sustainability

The policy contains sixteen strategies as follows:

1. Product stewardship framework legislation to allow the impacts of a product to be responsibly managed during and at end-of-life.
2. Sustainable procurement principles and practices across and within government operations.
3. Better packaging management to improve the use of resources, reduce the environmental impact of packaging design, enhance away from home recycling and reduce litter.
4. National definition and classification system for wastes (including hazardous and clinical wastes) that aligns with international conventions and has provision for items that have ceased to be classed as waste.
5. National principles, specifications, best practice guidelines and standards to remove impediments to effective markets for potential wastes.
6. Access to knowledge and expertise in sustainable procurement and business practices.
7. Continued government focus to reduce the amount of biodegradable material sent to landfill.
9. Strategy for emissions from landfills and other waste activities that support the operation of a future Carbon Pollution Reduction Scheme.
10. Improvements in waste avoidance and re-use of materials in the commercial and industrial waste stream.
12. Responsibility to meet international obligations; reduce hazardous materials entering the waste stream; dispose of and move transboundary waste in an environmentally sound manner in appropriate facilities.
13. Adoption of a system that aligns with international approaches to reduce hazardous substances in products and articles sold in Australia.

14. Identify actions to build capacity and ensure an appropriate suite of services is available to regional and remote communities.

15. Audit of existing waste infrastructure and local capability in selected remote Indigenous communities as part of essential services audit under the COAG National Indigenous Housing Partnership.

16. Publish a three yearly waste and resource recovery report, underpinned by a system that provides access to integrated national core data on waste and resource recovery.

(Source: Department of Sustainability, Environment, Water, Population and Communities, website summary of the National Waste Policy, updated 24th December 2010, viewed 4th August 2011)


Key aspects and recent movements in the implementation of the National Waste Policy include the National Environment Protection (Used packaging materials) Measure, the Australian Packaging Covenant, the Product Stewardship Bill, the introduction of a television and computer recycling regulated scheme and a voluntary mercury-containing lamp recycling scheme. Other areas of significance to local government are beverage container and plastic bag schemes. These are discussed further in the following sections.

The National Environment Protection (Used packaging materials) Measure, the Australian Packaging Covenant, schemes for mercury-containing lamps, plastic bags and beverage containers

The National Environment Protection Council Act governs the protection or management of particular aspects of the environment. National Environment Protection Measures (NEPM) are developed and reported on by the National Environment Protection Council (NEPC) comprising Ministers from Commonwealth, State or Territory Governments. NEPMs deal with air and water quality, protection from noise, assessment of site contaminations, hazardous waste and the reuse and recycling of used materials.

A NEPM is developed through the preparation of a draft and an impact statement that considers the reason for the proposed NEPM and the environmental impact of not making the NEPM and an identification and assessment of the economic and social impact on the community (including industry) of making the proposed NEPM.
Each State implements the NEPM through its own regulations. In Victoria, the NEPM is regulated through Environment Protection Authority’s Waste Management Policy (Used Packaging Materials) discussed in the section following.

With respect to waste and litter management the focus at a national level that has relevance to local government is on used packaging and mercury-containing lamps.

The National Environment Protection (Used packaging materials) Measure (Used Packaging NEPM) of which the goal is to reduce environmental degradation arising from the disposal of used packaging and conserve virgin materials through the encouragement of re-use and recycling of used packaging materials by supporting and complementing the voluntary strategies in the Australian Packaging Covenant (The Covenant).

The Covenant is a voluntary product stewardship agreement between companies in the packaging supply chain and all levels of government to reduce the environmental impacts of consumer packaging. The Covenant ensures that brand owner signatories to the Covenant are not competitively disadvantaged by fulfilling their commitments to the Covenant. In addition to clear goals for design, recycling and product stewardship, the Covenant provides an increased focus on workplace and public place recycling and litter reduction programs.

An important element of the Covenant is the Sustainable Packaging Guidelines, developed to assist Covenant signatories and others to review and optimise consumer packaging to make efficient use of resources and reduce environmental impact without compromising product quality and safety.

(Source: Environmental Protection and Heritage Council website, updated 27th July 2011, viewed 10th August 2011)

With respect to mercury-containing lamps, FlouroCycle was developed with the support of the EPHC, and is a voluntary national scheme to increase recycling of mercury-containing lamps. It commenced in July 2010 and focus on sectors that account for the largest consumption of mercury-containing lights being the commercial and public lighting sectors. The program is applicable to local government during public building refurbishments, de-lamping activities in public buildings that aim to save energy, and during street lighting change replacement programs. (Source: Department of Sustainability, Environment, Water, Population and Communities, website, updated 13th August 2010, viewed 10th August 2011)

Plastic bags are another item that has been considered by the EPHC. In 2002, EPHC resolved to reduce the environmental impacts of plastic bags. A voluntary retailer Code of Practice was the primary mechanism developed to achieve this. The Code operated from 2003 to 2005 and committed major retailer signatories to achieve a 50 per cent reduction in plastic bag use by 2005. Major retailers reduced plastic bags use by approximately 41 to 44 per cent and, nationally, Australians reduced overall plastic bag use by about 34 per cent. Given the limited potential for subsequent voluntary initiatives to significantly reduce plastic bag use, in June 2006 EPHC committed to phase out plastic bags by the end
of 2008, and to consider regulatory options for achieving this. EPHC reaffirmed this objective in June 2007. A Consultation Regulatory Impact Statement (RIS) was released in January 2007. The Consultation RIS found that regulatory options for a phase-out had economic costs which significantly outweighed the environmental benefits. In April 2008, EPHC noted the analysis presented in a Decision RIS on plastic bags, particularly the financial costs of regulatory options, and resolved to not endorse uniform regulatory action at this time to ban or place a charge on plastic bags. (Source: Environmental Protection and Heritage Council website, updated 27th July 2011, viewed 10th August 2011)

Regarding beverage containers in 2009 and 2010 the EPHC commissioned an assessment of potential options for national measures, including container deposit legislation, similar to South Australia, to address resource efficiency, environmental impacts, and the reduction of litter from packaging wastes such as beverage containers. In July 2010, the EPHC agreed to develop a Regulatory Impact Statement (RIS) for consultation. A stakeholder workshop was held in early December 2010 to inform the RIS and Ministers agreed to a work plan proposing release of a public consultation RIS by the end of 2011. EPHC agreed that in scoping the RIS it will consider not only container deposit legislation but also a limited number of options which may have a positive cost benefit and a tangible impact on recovery rates and litter reduction.

The RIS was released in December 2011 and consultation undertaken in March 2012. Options explored were a National Packaging Strategy, co regulatory product stewardship framework, mandatory advanced disposal fees or a mandatory container deposit scheme. The RIS does not include a preferred option and seeks feedback on these aspects. (Source: COAG Standing Council on Environment and Water, Packaging impacts Consultation Regulation Impact Statement, December 2011, National Environment Protection Council Service Corporation)

In Victoria an Environment Protection Amendment (Beverage Container Deposit and Recovery Scheme) Bill 2011 has been referred to Environment and Planning Legislation Committee (EPLC) for inquiry, consideration and report within six months of the passing of this resolution, and, in particular, the committee is to give consideration to proposals for nationally consistent or uniform approaches to waste recycling and disposal and the potential impact passage of the Bill in its current form may have on such options and make recommendations on Victoria’s engagement in national recycling initiatives and to include in the report an examination of environmental benefits and to further examine any cost of living impacts”. (Source: Victorian Parliament 30th August 2011).

**Product Stewardship Bill 2011**

A key development in the implementation of the National Waste Policy is the passing of the Product Stewardship Bill 2011 by Parliament on the 22nd June 2011. The Bill, will provide a national framework to manage the environmental, health and safety impacts of manufactured goods and materials across the
lifecycle of a product, including the impacts associated with the disposal of a product. This includes using materials more sustainably across priority product categories, industry sectors, and waste streams.

A list will be published each year of products being considered for coverage by the legislation. Some of the work under the National Waste Policy involves industry and government working together on voluntary action and other work involves some form of regulation. Products currently on the National Waste Policy implementation plan for product stewardship action include televisions and computers, packaging, tyres and mercury-containing lights.

Products to be regulated first are televisions, computers and computer peripherals. Regulations have been prepared by the Australian Government to underpin arrangements for collecting and recycling televisions and computers under the National Television and Computer Product Stewardship Scheme. (Source: Product Stewardship Bill 2011 Fact Sheet, National Waste Policy, Department of Sustainability, Environment, Population and Communities)

The regulations do not define the how local government is involved, but set a framework and opportunity for industry to work with local government to establish systems for recycling televisions, computers and computer peripherals. The Council does not have a dedicated service to recycle televisions, computers and computer peripherals and it would be important for the Council to understand the opportunity in terms of the regulations, how many televisions, computers and computer peripherals are disposed of from Hobsons Bay, the likely financial implications and a process that protects the Council and the community from health, safety, financial and legal risks and a program that is useful.

Collecting hard rubbish and cleaning up illegal dumping, including discarded televisions, computers and electronic waste (e-waste), is a significant cost to local government. E-waste is defined as any surplus, obsolete or broken electrical or electronic devices.

The Council’s at call hard waste collection service was introduced in August 2003 and with the exception of mattresses most of the hard waste was disposed to landfill. In June 2011, the Council introduced a contract whereby recycling of hard waste was required. In the 2010/2011 financial year the Council collected 750 tonnes of hard waste. For the first six months of 2011/2012 the Council has collected 770 tonnes of hard waste. An average of approximately 68 per cent is recycled.
The Council has collected the following number of e-waste items collected as part of the hard waste collection service.

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of e-waste items collected as part of the hard waste collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2011</td>
<td>300</td>
</tr>
<tr>
<td>September 2011</td>
<td>288</td>
</tr>
<tr>
<td>October 2011</td>
<td>321</td>
</tr>
<tr>
<td>November 2011</td>
<td>348</td>
</tr>
<tr>
<td>December 2011</td>
<td>293</td>
</tr>
</tbody>
</table>

Table 3: Number of e-waste items collected as part of the hard waste collection service

The actual number of each type of item is unavailable at this time but it is estimated that approximately 100 televisions per month are collected. This is similar to experiences of other Councils. Metal from e-waste is recycled. The collection of hard rubbish costs the Council $271,000 per year (2011/2012 budget)

Televisions and computers are often collected as dumped waste and are land filled. Approximately 520 televisions and computers are collected each year. The Council’s budget for collection and disposal of litter including dumped waste is approximately $558,000 each year (2011/2012 budget) and is subject to fluctuation with tonnes collected. (Source: Hobsons Bay City Council, Submission Product Stewardship (Television and Computers) Regulations 2011, October 2011)

There are no regionally coordinated e-waste facilities easily accessible to the Hobsons Bay community. The area has private waste recycling companies accessible to the community and the Council. Partnering with an e-waste recycling company to provide a recycling facility and service would cost the Council approximately $80,000 per year.

The Council supports the implementation of an industry-funded program to better manage e-waste across the municipality and in October 2011 made a submission to the draft Product Stewardship (Television and Computers) Regulation 2011. The Council will also advocate for the development of an e-waste facility in Melbourne’s west, that is conveniently located for Hobsons Bay residents (Action Item 1).

The cost is likely to reduce as the televisions and computer recycling scheme is implemented and manufacturers share the cost burden of the electronic waste issue. There is a need to scope the opportunity and best way forward for its community with respect to the television and computer recycling scheme and more broadly electronic.
waste. Therefore the Council will develop a business case for an electronic waste recycling service, undertake a trial, benchmark and research for consideration for future implementation (Action Item 1).

**Carbon Price and future Emissions Trading Scheme (ETS)**

*Securing a Clean Energy Future*, the carbon price and future Emissions Trading Scheme (ETS) is the Federal Government’s response to climate change, which it acknowledges is occurring due to human activities. Applying a ‘price’ to carbon dioxide equivalent emissions (Co$_2$-e) is a common response throughout the world to lowering emissions.

The carbon price will come into effect from the 1$^{st}$ July 2012, with a price that will be fixed for the first three years like a tax. The price will start at $23 per tonne with a 2.5 per cent increase per annum in real terms. From 1$^{st}$ July 2015 the carbon price will transition to a fully flexible price under an emissions trading scheme (ETS), with the price determined by the market.

The carbon price will be applied to the 500 most carbon intensive facilities from which greenhouse emissions are released into the atmosphere. Stationary energy, some transport, industrial processes, waste from landfills closed prior to 1$^{st}$ July 2012 (legacy waste) and fugitive emissions will be included. Agriculture and some transport will not be included. Of the 500 identified carbon emitters, 190 are landfill operators.

Under the carbon price a landfill that emits more than 25,000 tonnes of Co$_2$-e determines that the responsible organisation for the landfill must purchase credits. The Council is not responsible for any currently operating landfill that meets this threshold and is therefore not liable nor does it need to purchase permits.

Many landfill operators that meet the threshold are liable and will pass on the costs of a carbon price and permits to their customers. Waste generates methane which contributes more carbon dioxide to the atmosphere.

Hobsons Bay City Council does not own or manage a landfill, but currently collects approximately 20,000 tonnes (2010/2011) of waste per year that is disposed to Wyndham City Council’s Werribee landfill.

The landfill costs increases to the Council are unconfirmed at the time of developing the Plan. The equivalent price per tonne of waste of one Co$_2$-e has been estimated at $30 per tonne of waste.

Early calculations suggest an increase of $650,000 in 2012/2013 to the Council under a business as usual model and increasing as waste generation and disposal to landfill increases.

The challenge for landfill operators is how to charge a gate fee for the waste that reflects the cost they will have to pay for waste that emits for decades. Currently, the Metropolitan Waste Management Group (MWMG) is developing a ‘carbon calculator’ to help it assess landfill operator claims for cost increases.
resulting from the carbon price. It is also producing fact sheets for local government.

The transport of waste by collection vehicles will also be affected by changes to fuel tax credits under the carbon price and ETS, but to a lesser degree than land filling.

The following table gives an indication as to the changes in fuel tax credits. The current fuel tax credit for diesel, which waste collection contracts work within is 15.043 cents per litre.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrol</td>
<td>5.52</td>
<td>5.796</td>
<td>6.096</td>
</tr>
<tr>
<td>Diesel and other liquid fuels</td>
<td>6.21</td>
<td>6.521</td>
<td>6.858</td>
</tr>
<tr>
<td>LPG</td>
<td>3.68</td>
<td>3.864</td>
<td>4.064</td>
</tr>
<tr>
<td>LNG &amp; CNG</td>
<td>6.67</td>
<td>7.004</td>
<td>7.366</td>
</tr>
</tbody>
</table>

Table 4: Fuel tax credit reduction under a Carbon Price and ETS (Source: Fact Sheet Transport Fuels, Clean Energy Future, Australian Government, 2011)

Opportunities in the municipal waste sector are to reduce waste to landfill through:

- investing in technological solutions alternative to land filling that recover more recyclables, garden waste, food waste and other traditionally land filled waste such as nappies
- community engagement to increase waste avoidance and reduction
- new innovative services that reduce waste in hard waste services eg electronic waste service, mattress recycling, or a local reverse garbage shop
- utilise landfill services that have emissions capture infrastructure to reduce the carbon price impact
- minimising the distance to transport waste

With respect to other National developments the Council will take the necessary steps to ensure that they are assessed and implemented where appropriate at the local level.
Victorian Government

The State Government is responsible for establishing state policy and creating and implementing legislation and programs relevant to state-wide waste and litter management.

A variety of measures have been adopted by states and territories including licensing of specified waste management activities, tracking of regulated wastes, design rules for waste equipment, financial mechanisms to support market and infrastructure development, behavioural change initiatives and product lifecycle initiatives.

Two strategies that guide or have guided local waste and litter management are the Towards Zero Waste Strategy (TZW) and the “Creating Cleaner, Safer Places - Working together to remove litter from Victoria’s environment” (the Victorian Litter Strategy). Legislation that underpins waste and litter management in Victorian is the Environment Protection Act 1970. Other influences include Waste Management Policies administered by the EPA such as the Best Practice Environmental Management - Siting, Design, Operation and Rehabilitation of Landfills (Landfill BPEM) and the Waste Management Policy for Used Packaging Materials. Best practice guides to kerbside recycling and waste management in multi unit developments and Occupational Health and Safety guidelines have also shaped waste and litter management in Victoria. These are discussed further in the following sections.

Environment Protection Act

The Environment Protection Act (the Act) was at its inception only the second Act in the world to deal with the whole of the environment in a systematic and integrated way. The purpose of the Act is to create a legislative framework for the protection of the environment in Victoria having regard to the principles of environment protection.

The Act establishes the powers, duties and functions of Environment Protection Authority (EPA) and the Metropolitan Waste Management Group (MWMG). These include the administration of the Act and any regulations, State environment protection policies (SEPPs) and industrial waste management policies (IWMP), issuing works approvals, licenses, permits, pollution abatement notices and implementing National Environment Protection Measures (NEPMs). The Act regulates discharges to air, water and land and the control of noise and littering. It also governs solid industrial and municipal waste management planning and establishes landfill levies.

Municipal waste management planning and landfill levies are discussed further in the Plan.
Environment Protection Authority - Best Practice Environmental Management - Siting, Design, Operation and Rehabilitation of Landfills (Landfill BPEM).

The Best Practice Environmental Management - Siting, Design, Operation and Rehabilitation of Landfills (Landfill BPEM) is used by EPA, industry and others in relation to works approval applications and compliance activity. Applicants for a works approval or licence for a landfill must meet the objectives and required outcomes set out in the Landfill BPEM.

EPA has reviewed the Landfill BPEM to incorporate new technology and the latest understanding of improved management practices at landfills. The revisions to the document also respond to a number of the recommendations of the Victorian Ombudsman’s report *Brookland Greens Estate — Investigation into Methane Gas*.

The Landfill BPEM applies to planning applications for developments within 500 meters of landfills containing putrescible (rotting) wastes and 200 meters of landfills of solid inert wastes such as building materials. The Landfill BPEM is intended to be used in the design and assessment of proposals for new landfills. However the BPEM guidelines do seek to provide guidance about planning decisions which might allow use and development in close proximity to land fill sites. The BPEM guidelines only apply where a planning permit application is required.

The Council does not operate a landfill but has decommissioned municipal landfills that the Council must consider the management of to comply with the Landfill BPEM.

The Council is currently preparing a guide for future planning decisions around these areas. A decision making matrix for the Council will be established that provides clear guidance to the Council on the risk assessments that should be requested to support both planning permit applications and planning scheme amendment applications.

The assessment will be based on the nature of the proposed use and development and the knowledge about risks presented by the relevant decommissioned landfill.

Environment Protection Authority - Waste Management Policy (Used Packaging Materials)

The Waste Management Policy (WMP) is the Victorian application of the NEPM mentioned earlier in this section “Government Roles and Responsibilities”. Reducing environmental degradation arising from the disposal of used packaging and the conservation of raw materials are the underlying principles of this WMP. It is encourages the re-use and recycling of used packaging materials by supporting and complementing the voluntary strategies in the Australian Packaging Covenant.

The Municipal Association of Victoria (MAV) of which a Council is a member, is a signatory to the Australian Packaging Covenant.
Environment Protection Authority - Landfill Levy

Landfill levies are used for the purposes of environment protection and fostering environmentally sustainable use of resources and best practice in waste management. They fund the activities of regional waste management groups (RWMGs), Sustainability Victoria and EPA, help to establish waste management infrastructure, industry waste reduction programs, education programs, regulatory controls and enforcement regimes. Levy funds are also allocated by the Treasurer and the Minister for Environment through the Sustainability Fund.

Levies also provide an incentive to minimise the generation of waste, sending a signal to industry that the Government supports efforts to develop alternatives to disposal to landfill (Source: EPA website, 28th October 2011).

Table 5 documents the history and current future of the land fill levy. In June 2011, the Victorian Government increased the landfill levy by 10 per cent more than expected, from $40 per tonne to $44 per tonne. This was done through an allowance in the Environment Protection Act.

<table>
<thead>
<tr>
<th>Date when waste is deposited</th>
<th>Landfill levy for each tonne deposited by Metropolitan Municipal waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st July 2001 and 30th June 2002</td>
<td>$4</td>
</tr>
<tr>
<td>1st July 2002 and 30th June 2003</td>
<td>$5</td>
</tr>
<tr>
<td>1st July 2003 and 30th June 2004</td>
<td>$7</td>
</tr>
<tr>
<td>1st July 2004 and 30th June 2005</td>
<td>$9</td>
</tr>
<tr>
<td>1st July 2005 and 30th June 2006</td>
<td>$11</td>
</tr>
<tr>
<td>1st July 2006 and 30th June 2007</td>
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<td>1st July 2007 and 30th June 2008</td>
<td>$15</td>
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<td>1st July 2008 and 30th June 2009</td>
<td>$15</td>
</tr>
<tr>
<td>1st July 2009 and 30th June 2010</td>
<td>$15</td>
</tr>
<tr>
<td>1st July 2010 and 30th June 2011</td>
<td>$30</td>
</tr>
<tr>
<td>1st July 2011 and 30th June 2012</td>
<td>$44 (prior to June 2011 this was $40)</td>
</tr>
<tr>
<td>1st July 2012 and 30th June 2013</td>
<td>$48.40</td>
</tr>
<tr>
<td>1st July 2013 and 30th June 2014</td>
<td>$53.20</td>
</tr>
<tr>
<td>on or after 1st July 2014</td>
<td>$58.50</td>
</tr>
</tbody>
</table>

The landfill levy has had some positive influence on recycling rates however in the absence of alternatives to land filling, it has struggled as a market instrument in reducing waste and resource recovery. Therefore more investment in resource recovery ideally through funding from the landfill levy is required.

With the introduction of the Carbon Price it would be important that the landfill levy is reviewed to exclude double counting of carbon impacts of waste disposal or processing.

The Council should advocate, independently or collectively with other Councils, to the State Government to invest in resource recovery providing funding from the landfill levy and review the landfill levy to ensure the carbon costs of waste are not double counted in the Carbon Price (Action Item 2).

**Environment Protection Authority - Litter Enforcement**

Responsibility for enforcement of the litter provisions of the EP Act is shared between a range of agencies, including local government, EPA, Victoria Police and public land management authorities such as VicRoads, Parks Victoria, catchment management authorities and Melbourne Water.

The EPA enforces the provisions of the EP Act, most notably through a litter reporting system that saw over 22,000 persons fined in the 2005/2006 financial year. In 2008/2009 19,465 fines were issued. EPA also has the power to enforce provisions of the EP Act that relate to serious offences of illegal dumping and pollution.

This Litter Enforcement Toolkit is a resource tool to assist litter enforcement officers and authorities to develop and implement strategies to tackle littering issues and to assist and guide the use of the *Environment Protection Act 1970*. It has been developed in response to feedback from litter enforcement officers so that it meets identified needs.

**Sustainability Victoria - Towards Zero Waste Strategy**

The Victoria Government’s *Towards Zero Waste Strategy* (TZW) establishes goals and directions for Victoria’s solid waste management and resource recovery to 2014. The strategy is guided by three objectives:

1. to generate less waste
2. to increase the amount of materials for recycling and reprocessing
3. to reduce damage to our environment caused by waste

The strategy establishes state-wide priorities and provides the framework and direction for three waste producing sectors as follows:
• Municipal solid waste;
• Commercial and Industrial (C&I); and
• Construction and Demolition (C&D).

The Council’s role and responsibilities regarding waste and litter are limited to this municipal solid waste. The Council’s operations do not extend to managing construction and demolition waste nor the management of operating landfills. It does have a role in local planning policies relevant to development and the use of resources during construction, demolition and operation of a building or facility. The Council’s role within the commercial and industrial sectors is limited to those businesses utilising the Council’s municipal waste services. The Council has a role to engage and educate all sectors of the community to reduce waste and litter and manage it appropriately with particular focus on householders.

Targets that are set in TZW that relate to Municipal Solid Waste are as follows:

• A 1.5 million tonne reduction and a 75 per cent (by weight) of solid waste recovered for reuse, recycling and/or energy generation, by 2014 across these three sectors.
• A 65 per cent recovery rate (by weight) of municipal solid waste for reuse, recycling or energy generation by 2014. An interim target of 45 per cent was established for 2008/2009 financial year.
• A 25 per cent improvement, from 2003 levels, in littering behaviours by 2014.
The *Towards Zero Waste Strategy* also establishes priority materials and products within each sector. For the municipal sector, the priority materials and products are shown in Table 6.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Garden Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food Organics</td>
</tr>
<tr>
<td></td>
<td>Paper/cardboard</td>
</tr>
<tr>
<td></td>
<td>Timber</td>
</tr>
<tr>
<td>Products</td>
<td>Electrical and electronic appliances (including televisions and mobile phones)</td>
</tr>
<tr>
<td></td>
<td>Computers and peripheral IT equipment</td>
</tr>
<tr>
<td></td>
<td>Tyres</td>
</tr>
<tr>
<td></td>
<td>Consumer packaging</td>
</tr>
<tr>
<td></td>
<td>Paint</td>
</tr>
<tr>
<td></td>
<td>Mercury Containing Lamps including fluorescent lamps</td>
</tr>
<tr>
<td></td>
<td>Treated timber</td>
</tr>
<tr>
<td></td>
<td>Batteries</td>
</tr>
<tr>
<td></td>
<td>Plastic shopping bags</td>
</tr>
<tr>
<td></td>
<td>Motor vehicles</td>
</tr>
</tbody>
</table>

Table 6: Summary of priority materials and products for the municipal sector (Source: *The Towards Zero Waste Strategy*, Sustainability Victoria, 2005)

Actions for achieving the municipal waste target set out in TZW are as follows:

1. Sustainability Victoria, Waste Management Groups and local governments will identify opportunities for resource recovery services, as appropriate through relevant planning processes. Waste Management Groups will facilitate contractual arrangements between local governments and the private sector for the provision of these services.

2. Sustainability Victoria will facilitate the establishment of product stewardship arrangements supported by appropriate tools such as regulatory underpinning legislation or sustainability covenants for TVs, computers, IT equipment, other electrical and electronic products, tyres, consumer packaging (including plastic bags), paint and mercury containing lamps.

3. Sustainability Victoria will facilitate the establishment of product stewardship arrangements supported by appropriate tools such as regulatory underpinning legislation or sustainability covenants for batteries (domestic and portable equipment), motor vehicles and treated timber.
4. Sustainability Victoria, with industry participation, will facilitate the establishment of product stewardship arrangements for responsible disposal of domestic chemicals and related packaging, to increase removal from kerbside collection and landfill during the life of this strategy. Domestic chemicals include motor and farm oil and other chemical products.

5. Local government, the Municipal Association of Victoria and other bodies including Sustainability Victoria, will establish benchmarks and targets for recycled-content purchasing (based on ECO-Buy data).

6. Sustainability Victoria and Waste Management Groups will work closely with industry over the next three years to:
   - Ensure recycled organic products are of a consistently high standard and matched to market demands (fit-for purpose)
   - Enhance and develop markets for recycled organic products.

7. Through the Recycling in Public Places Program, Sustainability Victoria will provide increased assistance to local governments, Waste Management Groups, land managers, major events and venue managers, to provide efficient and accessible recycling services away from home.

8. EPA Victoria will investigate the practicability of landfill bans for municipal waste types and/or streams. The implementation of any such ban, where considered necessary, would need to be in place with sufficient lead-time to assist in meeting the strategy’s objectives for 2014.

9. Sustainability Victoria will work with EPA Victoria, Waste Management Groups, local government and the waste management industry to improve the quality of municipal data collection, management and reporting, throughout the life of the strategy.


11. EPA Victoria and Sustainability Victoria will evaluate and encourage the uptake of broad sustainability indicators such as the Ecological Footprint to build community understanding of resource efficiency.


Each year Sustainability Victoria, surveys local government to measure waste disposal efficiency and sustainability and monitors the State’s progress towards set in TZW. Figure 4 and 5 shows the trends in municipal waste generation in Victoria.

Key findings are as follows:

- Less than two million tonnes of kerbside waste (garbage, recyclables and green organics) was collected, up by 4.7 per cent (or 88,526 tonnes) from the previous financial year. More than half
(58 per cent) was directly attributed to the increased recovery of green organics (an additional 51,242 tonnes collected).

- The cost to local governments of kerbside collection exceeded $270 million, an increase of more than $11 million (4.4 per cent) from the previous year.
- The state-wide average diversion rate for recyclables and green organics – i.e. the amount recycled (and therefore diverted from landfill) – has increased from 43 per cent in 2008–09 to 44 per cent in 2009–10. Since 2000–01, the diversion rate has increased steadily every year and improved by 18 percentage points. The largest increase was recorded between 2003–04 and 2004–05 when most local governments adopted the best practice bin systems for recyclables.
- Garbage accounted for 53 per cent of total waste, one percentage point less than in 2008–09. The proportion of garbage collected has steadily decreased since 2000–01 when it represented 70 per cent of total kerbside waste collected.

(Source: Sustainability Victoria, Victorian Local Government Annual Survey 2009-2010)
Figure 5: Tonnes collected for the three main kerbside services, Victoria 2000/2001 to 2008/2009 (Source: Sustainability Victoria, Victorian Local Government Annual Survey 2009-2010)

With respect to overall Victorian waste generation, commercial and industrial and construction and demolition resource recovery rates the following is a summary of results for 2009-2010.

Table 7: Summary of 2009/2010 results against projected TZW targets (Source: Sustainability Victoria, Towards Zero Waste Progress Report 2009-2010)

Total generation of solid waste was higher than the projected target of 10.22 million tonnes indicating Victoria is not on track to meet the 1.5 million tonne reduction from business as usual. This continues to remain a significant challenge, especially in light of Victoria’s projected population growth. Despite the increase in solid waste generation, the majority of the increase in generation was recovered.
Figure 6 below illustrates the trend in solid waste generation and recovery relative to economic and population changes. Data includes municipal, commercial and industrial and construction and demolition waste.

Figure 6: Solid waste generation and recovery trends relative to economic and population changes (Source: Sustainability Victoria, Towards Zero Waste Progress Report 2009-2010)

Solid waste generation per capita increased to 2.09 tonnes reversing the downward trend since 2005–06, the only other time it rose above 2 tonnes in the data period. This was an increase of 160 kilograms per person in 2009–10, an increase of 8.3% from 2008–09. Of the 2.09 tonnes generated by each person 1.39 tonnes was recovered, an increase of 12.8% from the 2008–09 figure of 1.23 tonnes recovered per capita.

Another important source data to measure performance and establish strategy direction is composition audits of waste and litter systems.

The latest audit of the composition of municipal household garbage across four metropolitan Melbourne councils was in 2008, undertaken by Sustainability Victoria. To supplement these findings, Sustainability Victoria also reviewed bin audits conducted by Melbourne’s metropolitan local governments between 2005 and 2007. The results of the 2008 audit are shown in Figure 7. The audit results show the composition of a household garbage bin within a three bin system, the service provided to Hobsons Bay residents and some of the municipality’s small businesses since February 2004. Of significance is the quantity of recyclables (17 per cent) and organic type waste in the household garbage bin, comprising food waste (42 per cent) and garden waste (5 per cent).
Figure 7: Garbage bin contents composition by weight: Metropolitan municipalities with three bin system
(Source: “Kerbside garbage composition: recent findings” Sustainability Victoria, 2008)

Due to the age of the data and its importance for monitoring performance and establishing strategic direction, it would be important for the Council to advocate to the State Government and MWMG to undertake these audits at Victorian and metropolitan level and consider its own auditing local activities (Action Item 3.1).

The Council’s intention, expressed in the Issues Paper, was to aim for TZW targets associated with municipal waste. However, future activities that are likely to impact these targets and the Council’s initiatives will be the outcomes of the Victorian Auditor-General’s June 2011 report on Municipal Solid Waste Management which reviewed the performance of Sustainability Victoria, Department of Sustainability and Environment (DSE) and TZW and the development of a new Victorian Waste Policy as a result of these reviews.

The Auditor-General's reported noted that while Victoria met four out of six mid-term TZW targets, progress related to the municipal solid waste sector, a significant source of organic waste, and therefore greenhouse gases, has been slow.

The Auditor-General found that Sustainability Victoria and the Department of Sustainability and Environment have not effectively fulfilled their roles in implementing the strategy, resulting in ineffective
implementation planning, leadership, coordination, and oversight. Also that TZW targets were not based on sound assumptions. The Auditor-General noted that the reliance on increasing landfill levies to reduce the amount of waste going to landfill was problematic and unlikely to have an impact on achievement of the municipal TZW target. Further, that Sustainability Victoria has missed an opportunity to thoroughly review the strategy and modify it to improve its effectiveness, and the prospect of the municipal TZW outcomes being achieved by 2014 is unlikely.

Recommendations will impact the Council’s service planning, collaboration with agencies, data collection and reporting, policy development and future reviews of this Plan. They include the following:

The Department of Sustainability and Environment (DSE) should:

- Clarify and confirm the roles, responsibilities and accountabilities of public sector entities involved in waste management and the implementation of the Towards Zero Waste Strategy.
- Enhance the transparency and accountability of funding arrangements and align funding with current waste management priorities.
- Clarify the oversight and accountability arrangements for Sustainability Victoria in relation to the Towards Zero Waste Strategy.

Sustainability Victoria should:

- Assess the status and relevance of the Towards Zero Waste strategy actions.
- Complete development of an implementation plan for the Towards Zero Waste Strategy in consultation with stakeholders.
- Coordinate the completion of regional and local waste management plans, and periodically review them for adequacy.
- Establish a framework for progress monitoring, evaluation, and reporting, and assess the effectiveness of strategy actions, and their cost effectiveness in implementation.

Sustainability Victoria should:

- Meet the intended objectives of the mid-term review by completing outstanding analysis.
- Coordinate the development of regional and local performance indicators to enable contributions to the state-wide targets to be reliably measured.
- Develop a knowledge management system to rationalise data, identify and rectify data quality issues and modelling accuracy.

(Source: Victorian Auditor-General’s Report, Municipal Solid Waste Management, June 2011)

Further changes are likely to be reflected in another Victorian Auditor-General audit on Municipal Solid Waste Disposal which is scheduled in the 2011/2012 financial year.
The Auditor-General’s reports have led to a review by the Department of Sustainability and Environment of the Victorian Waste Policy framework. The timeline is as follows:

- Public discussion paper by December 2011
- Stakeholder engagement December 2011 to April 2012
- Policy development February 2012 to December 2012

The Council should actively participate in the Victorian Waste Policy review, review new targets and strategies established and consider their adoption by the Council. (Action Items 3.2 and 3.3)

**Sustainability Victoria - Creating Cleaner, Safer Places – Victoria’s Litter Strategy**

The objectives of the 2009 “Creating Cleaner, Safer Places - Working together to remove litter from Victoria’s environment” (the Litter Strategy) are to:

- prevent litter
- improve litter management practices
- meet the TZW littering behaviour target to improve littering behaviours by 25 per cent by 2014, compared to 2003 levels
- achieve clean and safe public places

The elements of behaviour change described earlier in section titled “Waste Minimisation Hierarchy and Litter Management Framework” are adopted by the Litter Strategy.

The Litter Strategy outlines four areas for future directions:

1. a coordinated state-wide approach that
   - has an action plan that maximises outcomes and avoids duplication
   - is clear on stakeholder roles and where litter is considered in planning of new government policy and initiatives
   - investigates the establishment of a central reporting system for littering
   - investigates the establishment of an illegal dumping database
   - works with local government to establish a regional illegal dumping squad

2. improved litter prevention and management through
   - street sweeping guideline and training for councils
   - litter bin management training for councils
• the increased number of council litter enforcement and education officers
• install bins for recyclables and improved bins for rubbish at railway stations and major tram stops
• regional and rural illegal dumping, litter and public place recycling projects

3. behavioural change through
• investigation of a targeted advertising campaign
• continuing Keep Australia Beautiful Victoria (KABV) Tidy Towns, Clean Beaches and Sustainable Communities Awards
• providing education materials through Resource Smart Schools
• provision of litter prevention kits including roadside litter
• continuing the Adopt a Roadside, Clean Site and Stationeers Programs

4. improved measurement and reporting through
• continuing the Annual Victorian Litter Report (VLR)
• allowing VLR methodology to be accessible
• development and training of best practice measurement and evaluation tools for local programs
• continuing to support the National Litter Index (NLI)
• continuing and improving the Local Government Data Collection Survey
• the roll out of the MWMG’s template for a council litter strategy

Initiatives referenced above as “continuing” are progressing. In 2010, the Victorian Government announced six million dollars towards improved public place recycling, roadside litter prevention, litter prevention officers, a litter behaviour change campaign and improved litter measurement.

A Litter Strategy Action Plan 2010-2014 is being developed by Sustainability Victoria in partnership with the Environment Protection Authority Victoria (EPA Victoria) and the Victorian Litter Action Alliance (VLAA).

The Victorian Litter Action Alliance (VLAA) is the peak body for litter management and prevention in Victoria. It aims to provide a coordinated approach to preventing litter in Victoria across the state and local government, industry and community sectors. There are fourteen members of the Alliance who each play their own part in the fight against litter.
These organisations are Sustainability Victoria, Butt Free Australia (formerly the Butt Littering Trust), EPA Victoria, Melbourne Water, Parks Victoria, VicRoads, City of Melbourne, the Municipal Association of Victoria, the Victorian Local Governance Association, the Packaging Stewardship Forum, Keep Australia Beautiful Victoria, Association of Victorian Regional Waste Management Groups, the Metropolitan Waste Management Group and the Victorian Waste Management Association.

In terms of progress towards litter prevention, Figure 8 illustrates an improvement in littering behaviour in 2009, of 17.2 per cent, which is on track to meet the 2014 target, exceeding the 13.6 per cent notional target by 3.6 percentage points.

![Figure 8: Litter trends in Victoria, per cent change](Source: Sustainability Victoria, Victorian Litter Report for 2009-2010)

**Sustainability Victoria - Guide to Preferred Standards for Kerbside Recycling in Victoria**

Released in 2000 and revised in 2004, EcoRecycle Victoria’s (the former Sustainability Victoria) Guide to Preferred Standards for Kerbside Recycling in Victoria (Preferred Standards) applied to the collection, sorting and transport of recyclables generated from both residential and non-residential properties.

In 2001 the Council undertook a Best Value Review of its waste management service applying the Preferred Standards to the review and service development.

The Preferred Standards in the year 2000, as they related to the Council and prior to the Council’s application of them in 2004, were as follows:
• a primary range materials to be collected including cardboard, newspaper, magazines, printing and writing paper, glass bottles and jars, aluminium cans, steel cans, Polyethylene Terephthalate (PET) bottles and containers (code 1 plastics) and clear High Density Polyethylene (HDPE) bottles (code 2 plastics).

• Subject to local market assessment at the time of contracting, the following secondary materials were recommended to be collected: liquid paperboard containers, coloured HDPE bottles, polyvinyl chloride (PVC) bottles (code 3 plastics), Polypropylene (PP) bottles (code 5 plastics), rigid containers of Low Density Polyethylene (LDPE) (code 4 plastics) and Polystyrene (PS) and Expanded Polystyrene (EPS) (code 6 plastics) and phone books and aluminium foil.

• For outer and metropolitan fringe, a 240 litre container for fully commingled or 240 litre container split fortnightly collection or a 120 litre container fully commingled weekly collection.

• A mechanised collection equipment to suit preferred containers and methods and systems that comply with the requirements of the OH&S Act 1985.

• A collection and sorting cost of between $25 and $35/household/year.

• A collection and sorting cost of less than $150/tonne/year.

• A minimum recycling yield of at least 3kg/week/households.

• The application of model contracts including no risk sharing for metropolitan Melbourne.

• The education of residents through the appointment of a waste and recycling education officer, written information, information at community events, recycling achievements.

• Use of accredited collectors and sorting contractors.

• Membership to Eco-Buy, the environmental purchasing network and program.

The Preferred Standards were revised in August 2004 to reflect changing market conditions, to respond to 2003 WorkSafe Victoria Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-hazardous Waste and Recyclable Materials and the draft TZW. These 2004 Preferred Standards were introduced after the Council implemented its service which was based on the year 2000 Preferred Standards of year 2000.

The changes that affect the Council are as follows:

• A collection and sorting cost of up to $45/household/year for metropolitan councils.

• A collection and sorting cost of less than $170/tonne/year for metropolitan councils with an "aspiration" target of less than $120/tonne/year.

• A minimum recycling yield of at least 3.5kg/week/household with an “aspiration” target of 4.5kg/week/household.
• An extended primary range of materials to be collected including cardboard, newspaper, magazines, printing and writing paper, glass bottles and jars, aluminium cans and foil, phone books, steel cans, liquid paperboard containers, and rigid containers of Polyethylene Terephthalate (PET) bottles (code 1 plastics), High Density Polyethylene (HDPE) (code 2 plastics), polyvinyl chloride (PVC) (code 3 plastics) and Low Density Polyethylene (LDPE) (code 4 plastics).

• Subject to local market assessment at the time of contracting, the following secondary materials were recommended to be collected: Polypropylene (PP) bottles (code 5 plastics), rigid containers of and Polystyrene (PS) and Expanded Polystyrene (EPS) (code 6 plastics).

• A 240 litre container for fully commingled or 240 litre container split fortnightly collection or a 120 litre container fully commingled weekly collection.

• Standard mobile bin lid colours: Yellow (Recyclables), Red (Garbage), Bright Green (Garden Waste and/or Food Organics) with dark green or black for the bodies

• Waste and recycling service provision to multi unit residential development

• Encouragement to provide kerbside collection services to non-residential sites, such as non rateable properties including sporting facilities, libraries, kindergartens, schools, churches and scout hall and small to medium size commercial enterprises (SMEs) with the same container and frequency as for residential properties

• Provision of feedback to residents on recycling and waste minimisation achievements

• Promotion on reduction of domestic waste opportunities through other systems such as retail drop off points, transfer stations, reuse opportunities, and other programs and services offered through EcoRecycle Victoria and other Councils.

• Methods and systems used must comply with and associated regulations, and be informed by relevant guidelines including the recommendations of the WorkSafe Victoria: OH&S Guidelines for the Collection, Transport and Unloading of Non-Hazardous Waste and Recyclable Materials (2003).

The Council’s performance against the 2000 and 2004 Preferred Standards are discussed in section “Waste management in Hobsons Bay”.

**Sustainability Victoria - Byteback**

Byteback™ is a free computer recycling service that lets Victorian residents and small businesses dispose of old, unwanted and non-functioning computers safely. Operating with funding from Sustainability Victoria there are only seven facilities in metropolitan areas at established waste transfer
stations or landfills, and one at an Officeworks store. The Council does not have such a facility. The closest centre is at Moonee Valley City Council transfer station in Moonee Ponds.

It is envisaged that this program will be replaced by any programs and services that arise from the national Television and Computer Recycling Scheme, mentioned earlier.

**Sustainability Victoria - Detox Your Home**

Detox Your Home is a free household chemical recycling service funded and coordinated by Sustainability Victoria. Mobile services and permanent facilities are components of the program. There are seven permanent facilities in metropolitan areas at established waste transfer stations or landfills. The Council does not have such a facility. The closest centre is at Brimbank City Council transfer station in Keilor Park.

In 2003, 2005, 2008 and 2011 Sustainability Victoria operated a mobile Detox Your Home program at the Council’s depot in Sugar Gum Drive, Altona on one weekend day. The following table illustrates the use of the service.

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2008</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cars</td>
<td>395</td>
<td>425</td>
<td>306</td>
</tr>
<tr>
<td>Average weight per respondent</td>
<td>50kg</td>
<td>38kg</td>
<td>39kg</td>
</tr>
<tr>
<td>Majority of the material collected</td>
<td>Paint (59 per cent), Oil (13 per cent), Batteries (12 per cent) and Compressed Gases (5 per cent)</td>
<td>Paint (57 per cent), Oil (13 per cent), Batteries (11 per cent) and Gas Cylinders (4 per cent). These are the High Volume, Low Toxicity (HVLT) items.</td>
<td>Paint (65.5 per cent), followed by oil (7.5 per cent), batteries (5.5 per cent) and Gas Cylinders (3 per cent). These are the High Volume, Low Toxicity (HVLT) items.</td>
</tr>
<tr>
<td>Respondents that were first time users of the service</td>
<td>71.9 per cent</td>
<td>30.6 per cent</td>
<td>64.1 per cent</td>
</tr>
<tr>
<td>Respondents that were repeat users of the service</td>
<td>28.1 per cent</td>
<td>69.4 per cent</td>
<td>35.9 per cent</td>
</tr>
</tbody>
</table>

Table 8: 2003 data is unavailable at the time of the Plan's development

The Council has previously applied for funding to establish a permanent ‘Detox Your Home’ facility within Hobsons Bay. The application was unsuccessful.
Due to the limited access the Council should actively seek to establish a permanent ‘Detox Your Home’ facility within the bounds of the municipality, a more regular mobile service or partnership with a local company that handles waste chemicals. (Action Item 5)

WorkSafe Victoria

Since 2003 WorkSafe Victoria has reformed the waste and litter management industry providing guidance on manual handling, prevention of falls and working near powerlines to assist the industry to meet duty of care under the Victorian Occupational Health and Safety Act 1985. The advice contained in WorkSafe Victoria guides are considered best practice by the waste and litter management industry. The guides and their intent are as follows:

- **Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-Hazardous Waste and Recyclable Materials (WorkSafe Victoria, June 2003)** are to prevent injuries and fatalities by implementing where practicable the following principles:
  - A ‘no lift’ approach to handling containers, bundles or packages
  - A ‘no riding’ on the outside of vehicles approach
  - A ‘no work at heights’ approach

- The **Prevention of falls in the transport of waste and recyclables: Supply Chain Safety Guide (WorkSafe Victoria, December 2004)** is to provide health and safety solutions to prevent falls, slips and trips when working on a vehicle or waste load.

- The **Waste Industry guide for working near overhead electrical cables: No go zone safety guide (WorkSafe Victoria, April 2005)** is to provide practical advice for work associated with the collection of waste involving the operation of plant near overhead electrical cables.

- The **Handbook for workplaces: Safe Collection of hard waste (WorkSafe Victoria, November 2008)** provides guidance on how to safely collect domestic hard waste and bundled garden waste broadly recommending the following:
  - Waste is placed on the kerbs for a minimum period of time.
  - Hard waste is stored and collected from within the property for at-call services.
  - Residents are clearly instructed on what hazardous waste will not be collected.
  - Residents are provided with alternative collection methods (eg information about collection companies and locations of garbage tips) and contacts for hazardous waste such as the Sustainability Victoria ‘Detox Your Home’ program or Mobile Muster.
Councils respond promptly to hazardous waste placed on the kerb.

Along with the preferred standards to kerbside services, these guidelines influenced the Council’s service introduced in 2004 of weekly garbage collections, fortnightly recycling and garden waste collections and hard waste collections. This was through the introduction of mechanised collections of waste from containers including garden waste, the introduction of a hard waste booking service with collections from within the property and revised contract specifications and management tools that comply with the guidelines.

Sustainability Victoria - Guide to Best Practice for Waste Management in Multi Unit Developments

Across Victoria there has been a steady increase in the number of multi-unit developments (MUDs), particularly in many of Melbourne's inner urban and middle suburban areas. In response Sustainability Victoria published in October 2010 the Guide to Best Practice for Waste Management in Multi-unit Developments with help from the Metropolitan Waste Management Group and input from councils. The guide assists council staff, architects, residential developers and building managers incorporate best practice in the design, establishment, operation and ongoing management of waste services in MUDs. It outlines essential points to be considered when designing a waste management system for medium or high-density residential, mixed-use and integrated housing developments.

Victorian Planning Scheme

The State planning policy framework provides guidance on where waste management and resource recovery facilities should be located, and what matters should be taken into account when considering proposals to establish such facilities. The following clauses are of particular relevance:

- Clause 19.03-5 Waste and Resource Recovery has an objective to avoid, minimise and generate less waste. Strategies to establish new sites for management of waste and resource recovery, maximise resource recovery in existing facilities, encourage co-location of waste and resource generators and resource recovery businesses, promote recycling and maintain and protect buffers.

- Clause 52.10 Uses with Adverse Amenity Potential is a particular provision that identifies industrial uses which, if not properly managed, may have unacceptable detriment on surrounding residential areas. It prescribes threshold distances from residential zones.

- Clause 52.45 aims to facilitate the establishment and expansion of a Transfer station and/or a Materials recycling facility in appropriate locations with minimal impact on the environment and amenity of the area.
With respect to the built environment the following clauses are particularly relevant to resource use and litter management.

- Clause 15.01-2 states that all building, subdivision and engineering works should include efficient use of resources and energy efficiency.
- Clause 56.08 site management aims to protect drainage infrastructure and receiving waters from sedimentation and contamination, to protect the site and surrounding area from environmental degradation or nuisance prior and during construction of subdivision works and to encourage the re-use of materials from the site and recycled materials in the construction of subdivisions where practicable.

Local Planning policies and programs are discussed further in later sections.

*With respect to Victorian programs and policy developments the Council will take the necessary steps to ensure that they are assessed and implemented where appropriate at the local level.*

**Regional Waste Management Groups**

Regionally based, state wide coordination of waste and litter management planning and behaviour change programs is overseen by thirteen Regional Waste Management Groups (RWMGS), who work collaboratively with local government. The RWMG that the Council presides within and is a member of is the Metropolitan Waste Management Group (MWMG). The MWMG is a Victorian State Government Statutory Body responsible for coordinating and facilitating the delivery of municipal solid waste management across metropolitan Melbourne. It was established on 1st October 2006 under the *Environment Protection [Amendment] Act 2006* when former smaller regional groups were amalgamated into the one. Previously the Council was a member of the Western Regional Waste Management Group (WRWMG).

MWMG works with Melbourne’s 30 metropolitan councils to:

- Plan for waste management and resource recovery facilities and services across metropolitan Melbourne.
- Facilitate procurement of efficient and sustainable resource recovery and residual waste disposal services for councils.
- Help build the capacity and knowledge of councils and their communities of world best practice waste minimisation and the opportunities and options available for improved services and infrastructure.
The MWMG operate under a Board made up of eight directors appointed by the State Government: four are selected by the Minister for Environment and Climate Change, and four are nominated by the 30 councils. The Chair is appointed by the Minister and selected from the four nominated members.

The Technical Advisory Reference Group (TARG) is a group established to advise, assist and inform the Forum. The group’s terms of reference (attached) establishes the functions of the group which provides for technical advice, investigations, reports, submissions and recommendations to the Forum. TARG consists of eight to twelve officers and/or Councillors. The Council is currently represented at officer level on TARG until 2013 and this officer is currently the Chairperson.

Other networks that the MWMG host includes the following:

- Local Government Waste Education Network to support local government waste and sustainability educators.
- Economic Development and Environment Network (EDEN) to support business sustainability and waste management.
- Schools Engagement Network to support Councils to assist schools to reduce waste and spread messages to the community.
- Councils Litter Environment Action Network (CLEAN) to support local government litter management.
- Transfer Station Resource Recovery Centre Network to assist councils to develop best practice at these facilities.

The Council has a long term active involvement in the Local Government Waste Education Network and participates in the CLEAN network.

The Council should continue to actively participate in the MWMG Local Government Forum and Local Government Waste Education Network, represent Local Government and the Council on the Technical Advisory Reference Group (TARG) for a two year membership term (Action Item 6.1).

**Metropolitan Waste and Resource Recovery Strategic Plan**

The 2009 Metropolitan Waste and Resource Recovery Strategic Plan (Metro Plan) was developed to assist Metropolitan Melbourne with the on-ground implementation of the Towards Zero Waste objectives. The development of the Metro Plan is a requirement of the Act and sets the framework for the management of all solid waste in metropolitan Melbourne. It acknowledges that, although the Towards Zero Waste objectives are state-wide, 70 per cent of waste is generated in metropolitan Melbourne. Further, over 75 per cent of recovery and reprocessing infrastructure and activity occur in the Melbourne
metropolitan district. The Metro Plan is administered by the Metropolitan Waste Management Group and has three parts as follows:

Part 1 – The Metropolitan Plan assesses the current situation and sets the strategic framework for the management of all solid waste in metropolitan Melbourne.

Part 2 – The Municipal Solid Waste Infrastructure Schedule sets out a schedule of existing and required infrastructure for municipal solid waste.

Part 3 – The Metropolitan Landfill Schedule sets a schedule identifying the location and sequence for the filling and operation of landfill sites.

At the time of developing this Plan the Metro Plan was under review.

There are three types of waste: municipal solid waste (MSW), from households and council operations; construction and demolition (C&D) and commercial and industrial (C&I).

With respect to municipal solid waste the Metro Plan centres on the importance of new infrastructure for resource recovery, known as ‘Advanced Resource Recovery Technology’ (ARRT) with services to match, that particularly focus on food organics. In 2009 organics processing infrastructure was limited to nine sites across Melbourne processing 250,000 tonnes per year, predominantly garden waste, with capacity of 370,000 tonnes per year. The existing infrastructure is limited to open composting which has a history of odour and dust complaints. TZW projects that a total of 1.1 million tonnes of garden and food organics will be recovered in the metropolitan area by 2014. (Metropolitan Waste and Resource Recovery Strategic Plan, Department of Sustainability and Environment, 2009)

Market development, combined purchasing strategies and effective land use planning are identified in the Metro Plan as important to the success of new infrastructure and food waste recovery. Food waste could be either recovered through a household garden waste collection or through a household garbage collection. Each approach requires new technology to manage the food waste to produce a marketable valuable product, revisions of the Council’s waste services, community education and regional combined purchasing strategies to help local government’s affordability of these new technologies.

To provide guidance, in 2008 the Victorian Government established the Victorian Advanced Resource Recovery Initiative (VARRI) project which aimed to establish new ‘Advanced Resource Recovery Technology’ (ARRT) facilities for metropolitan Melbourne and avoid landfill. The ten million dollar initiative proposed to develop a State wide business case including a thorough cost benefit analysis of different ARRT technologies, potential sites, funding options for the new facilities and municipal waste service models. The findings of the VARRI project were to influence the future of waste management in the metropolitan region. Options will likely impact the community with respect to cost with technologies ranging from $60 to $150 per tonne in 2009 (Source: Hobsons Bay City Council, Ordinary Council
Meeting, 14th July 2009, Item 7.4.1 Regional Green Waste Tender) compared with a 2011/2012 land filling rate of approximately $74 per tonne, which includes a $44 per tonne landfill levy.

The other impact is likely to be in the use of mobile garbage bins for food waste recovery with two options existing. One with the food waste remaining in the garbage stream and sent to an ARRT for resource recovery. The second with the food waste within the garden waste stream and sent to an ARRT. The latter requires significant community effort to change waste separation behaviours and may not result in maximum food waste recovery. Key learning’s of VARRI were released in March 2012 but due to the change in Government details of the business case are yet to be realised.

The Council should continue to advocate to the MWMG and State Government for further research into ARRT’s, to enable effective long term planning and localised collection service reviews that accommodate future waste technology advances. Alternatively the Council should seek to collaborate with other councils on similar research. (Action Item 4.1)

The Metro Plan identified that the extent to which councils promote source separation of food waste through kerbside organics recycling services will depend on the cost differential between processing source separated food waste compared to land filling garbage.

As the landfill levy applied to metropolitan municipal waste has increased significantly, this cost differential is diminishing.

The Metro Plan also identified the importance of resource recovery facilities and services that divert products such as paint, timber, metals, lighting, computers, mattresses, televisions and batteries, from landfill. These include transfer stations, resale centres, and Byteback and Detox Your Home programs.

The Metro Plan supports the reduction and avoidance of waste through community behaviour change programs however it is not specific on what programs these are.

It assumes that the current trends in waste generation per capita and per unit of economic growth (Gross State Product) will continue, because it requires a significant change in the community’s attitude on the issue of consumption.

With regard to litter prevention and control the Metro Plan references the development Victorian Litter Strategy.

**Regional tenders and contract**

All Councils provide waste and litter management services to communities but in varied ways, with diverse community and Council needs and with differing infrastructure. Since 1996, the MWMG, former WRWMG and groups of Councils have been involved in regional tenders and contracts, to achieve value
for money and economies of scale particularity in high investment facilities and land availability for waste management purposes is scarce.

These have included the following:

- Garden waste processing.
- Land filling.
- The collection of garbage, recycling and garden waste collections and recyclables processing.
- A Wet Materials Recovery Facility (Wet MRF) Project for the treatment and processing of the domestic garbage stream as a means of reducing municipal waste to landfill. Therefore a type of ARRT.
- The North West Organics Project for processing garden waste primarily, but with option for food waste and seaweed recycling.

Garden waste processing and land filling regional tenders and contracts have been usual business for regional tendering and contracting. However, regional tendering is becoming more complex. Governance processes are becoming increasingly important to protect individual council, the group of councils and the MWMG interests. Also compliance with fair trading and promotion of competition under the Competition and Consumer Act 2010 is essential.

Regional tenders for collection of garbage, recycling and garden waste collections and recyclables processing commenced in 2004 with eight of the nine member councils of the former Western Regional Waste Management Group. The Council participated in the tender but did not enter the contracts because the Council had more competitive rates at the time. The Council continues to independently tender for these services for the same reasons but will review options for regional and in house tendering as time progresses.

The North West Organics Project was tendered in 2009 by the MWMG and 11 councils, including Hobsons Bay, to deal with the lack of garden waste processing options in North and West Melbourne with options for food waste, street sweeping and seaweed recycling. In September 2010 the Council resolved to accept Veolia Environmental Services Australia Pty Ltd (Veolia) as the preferred tenderer subject to a variety of conditions being met.

Two fully enclosed ‘in vessel’ composting facilities, a form of ARRT, will be established as part of North West Organics Project by Veolia. One in Bulla which will have a capacity of 85,000 tonnes per year and the one at the Wyndham land fill in Werribee with a capacity of 35,000 tonnes per annum. The Wyndham facility will be established as an ‘in vessel’ composting facility when projected quantities, projected two years ahead, reach 95,000 tonnes per annum. In the interim period a transfer station will operate at the Wyndham site from which material from the western Councils will be transported to the Bulla facility for processing. The participating Councils anticipate that the capacity of the two facilities will be reached within the first year if garden organics from other sources such as parks and gardens, bundled garden
waste and garden waste received at transfer stations is incorporated with garden waste from bins. The recovery of food waste through the North West Organics Project will therefore not be realistic within the capacity limitations and additional ARRT facilities will be required.

The Council will actively encourage the MWMG to plan for more facilities to process garden waste with options for food waste, seaweed and street sweepings (Action Item 6.1).

Other factors affecting food waste recovery include the uncertainty in the best collection system and technology that maximises recovery and participation. The Council has been waiting the outcome of VARRI or similar research to determine its approach. Once completed, the Council will develop options for food waste recovery within its municipal waste services. (Action Item 4.2) This research will also play a part in street sweeping recycling and possible litter bin and stormwater waste processing. From early 2012, seaweed collected from Altona Beach by the Council will have the sand will removed using a rotating drum cleaning machine and the seaweed recycled into liquid fertiliser. The recycling of seaweed with save $83,000 per year in disposal costs.

The Landfill Services for Metropolitan councils were tendered in September 2010 by the MWMG and 21 councils. A number of preferred tenders were nominated and the Council resolved to accept Wyndham City Council’s tender for services from the Werribee Refuse Disposal Facility (RDF). The contract commenced on 1st April 2011. The prior contracts for these services were with Wyndham City Council, most recently and with the Brooklyn Landfill and Waste Recycling Pty Ltd landfill in Brooklyn since 1996 which discontinued accepting putrescibles (rotting) waste in 2008, resulting in land filling at the Werribee RDF.

The Council will locally implement the regional North West Organics Processing and Landfill service contracts, and actively participating in regional user group activities. (Action Item 7)

With respect to metropolitan programs the Council will take the necessary steps to ensure that they are assessed and implemented where appropriate at the local level.

**Local Government**

Of all levels of government, local government has the most ‘hands-on’ involvement with waste and management. However each level of government has responsibilities for ensuring environmental sustainability into the future. Similarly, waste and litter management at the local level will be shaped by state and national strategies, policies and legislation.
At a local level the Council is supported by the Municipal Association of Victoria (MAV). The following sections describe the strategic position of the MAV and the Council.

**Municipal Association of Victoria**

The Municipal Association of Victoria (MAV) works closely with the RWMGs and Councils, to help build effective waste management and resource recovery outcomes for local government.

The Municipal Association of Victoria (MAV) is the peak representative and advocacy body for Victoria’s municipal governments. The MAV lobbies government and industry to ensure local governments are able to provide constituents with adequate and appropriate services and facilities. The MAV has a strong interest in environmental services, including waste and management. Guiding local government in waste and litter management, the MAV’s 2011/2012 prioritises in waste and litter management are as follows:

- Actively participate in the state-wide waste review, seeking opportunities to bring together local government to highlight the key issues, such as the need to reinvest landfill levies into innovative resource recovery and landfill rehabilitation.
- Identify the environmental risks of landfills.
- Work with councils and EPA Victoria to find sustainable solutions to managing and rehabilitating landfills under higher environmental management and reporting requirements.
- Develop an improved relationship between the Environment Protection Authority and local government.
- Respond to the Container Deposit Legislation Regulatory Impact Statement on additional measures to increase the recycling of used packaging and decrease packaging-related litter.

(Source: Municipal Association of Victoria, Strategic Work Plan 2011/2012, May 2011)

**Hobsons Bay City Council Plan 2009-2013 (revised July 2011)**

The Council’s Vision is “Working together to achieve a vibrant and sustainable community that celebrates its diversity and provides opportunities for all”

It values set out in the Council Plan are as follows:

- **Passion** about our people, city, services and environment;
- **Respect** for each other;
- **Integrity**;
- **Diversity** in our people and environment;
- **Excellence** in all we do.

The Council Plan recognises the environmental challenges faced by the municipality now and into the
future. The Council Plan establishes environmental sustainability as a key strategic objective stating “The Council and the community will work together to minimise our impact on the environment of today and the future”. The relevant strategies and strategic indicators are listed in the following table. Every four year Council term, a new Council plan is developed setting key strategies and targets.

### Strategy for 2009-2013

<table>
<thead>
<tr>
<th>Strategy for 2009-2013</th>
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<tbody>
<tr>
<td>3.2 Move towards more sustainable use of resources.</td>
</tr>
<tr>
<td>3.4 Ensure environmentally responsible and effective waste management and recycling practices.</td>
</tr>
<tr>
<td>3.5 Work towards reducing the Council’s net emissions of greenhouse gases to zero by 2020 and assist the local community to achieve zero net emissions by 2030.</td>
</tr>
<tr>
<td>3.6 Undertake environmental education to improve community practice.</td>
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### Strategic indicator

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<tr>
<th>Strategic indicator</th>
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<tbody>
<tr>
<td>Achieve a community satisfaction rating for Waste Management of 78 or better.</td>
</tr>
<tr>
<td>Undertake four activities that assist the reduction of the Council’s greenhouse gas emissions.</td>
</tr>
<tr>
<td>Undertake four environmental education and awareness activities during the year.</td>
</tr>
</tbody>
</table>

Table 9: Hobsons Bay City Council strategies and strategic indicators (Source: Hobsons Bay City Council Plan 2009-2013 (revised July 2011))

### Hobsons Bay City Council Environment Strategies

Other Council environment type strategies are important to waste and litter management programs, services and planning. These are at varying stages of implementation, review or to be newly developed and include the following:

- The *Environment Strategy 2006-2010* addresses biodiversity, open space, water and energy conservation and waste and litter minimisation. This strategy is to be reviewed as since its development many theme specific plans have been developed in each of these areas.

- The *Greenhouse Action Plan 2008-2013* provides the policy framework for the Council to become carbon neutral by 2020 and to assist our community to become carbon neutral by 2030. The focus of this plan is on the Council’s activities. A midterm review is underway with corporate data
collection and community research which will inform a community greenhouse action plan.

- The *Water Plan 2009-2014* which outlines priorities for the next five years and incorporates stormwater management.

- The *Stormwater Management Plan 2006-2011* which is to be reviewed and has been incorporated into strategic objectives and actions into the Water Plan 2009-2014.

- The *Environmental Engagement Strategy*, which is the first of a five year strategy under development, and aims to drive community understanding, engagement and participation in support of a sustainable environment for the municipality. Themes to cover include waste and litter minimisation, water and energy conservation, biodiversity and stormwater protection. This strategy also aims to improve the coordination, resourcing and decision making with the Council on environmental activities for the community.

These strategies influence the Plan through the reduction of greenhouse emissions, water and energy conservation, stormwater protection in waste and litter initiatives and decision making. This Plan will also influence these strategies when they are reviewed and the decision making that takes place during their implementation.

Other non environmental Council plans, strategies and policies impact waste and litter management in terms of how the Council uses resources and how it provides services to its community. These include library strategies, community facility planning, service plans and social plans. The Council will encourage waste avoidance, reduction and reuse in its projects, and that its services align with waste and litter management policy and services.

**Hobsons Bay Local Planning Scheme - waste and litter management**

The Council has limited local planning provisions for reducing resources, using them more efficiently or specifically minimising litter. Clauses that are relevant include the following:

- 21.12 which aims to protect environmental values of the coast and manage stormwater discharge

- 21.11-2 encourages the use of treatment methods such as wetlands and litter traps for the control of urban runoff.

Programs that the Council have successfully introduced in 2007, that aim to improve resource efficiency and reduce materials use include the Sustainable Tools for Environmental Performance Strategy (STEPS) for residential developments and Sustainable Design Scorecard (SDS) for commercial and industrial developments.

Increasingly, the Council is requiring waste management plans of developers for multiunit and or mixed used developments, where it is considered a development may have operational issues with waste
management services provided to the development. Waste services to multiunit developments are discussed further later in the Plan.

**Not for Profit Organisation**

**Eco-Buy**

ECO-Buy encourages the purchase of ‘green’ products and services, in particular, encourages staff to consider the following before making a purchase:

- Whether the purchase is necessary;
- Greenhouse gas emissions associated with the manufacture, distribution and ongoing use of the item/s;
- Water efficiency of the item/s;
- Associated waste;
- Associated habitat destruction; and
- Toxicity.

The program is complemented by good practice in implementing important purchasing elements such as adopting Green Purchasing Policies and annual Action Plans, forming green purchasing Working Groups and including green specifications in contracts – all of which contribute to more environmentally preferable outcomes. Previously operated by the Municipal Association of Victoria, it is now a membership based program. When the program began in 2000/2001, members’ expenditure on green products was $5 million, and was exclusively spent on recycled content products. As this report shows, this figure has increased over the last eight years to at least $73.2 million spent across a broad range of green products in 2009/2010. (Source: The State of Victorian Local Government Green Purchasing in 2009/10, Eco-Buy, 2011)
Hobsons Bay City Council’s Waste and Litter Management – Community and service profile

In order to create informed waste and litter management goals, effective policy and priority programs, it is important to understand the municipality’s demography and trends and the status of waste and litter management in Hobsons Bay.

Residential Profile

Hobsons Bay is home to over 87,050 residents (2011), living in approximately 35,380 residential dwellings and 488 vacant residential properties. By 2020, the population is forecast to increase to around 93,136. Most of this growth is expected to be in the Altona North, Spotswood and South Kingsville neighbourhoods. The average number of people living in each household is 2.53, lower than the metro Melbourne figure of 2.61. By 2020, the average household size in Hobsons Bay is forecast to drop to 2.43 people. More than 70 per cent of resident’s dwellings are separate houses, with only one fifth living in medium density dwellings.

Hobsons Bay is an established municipality with limited undeveloped land suitable for residential use. Housing numbers are predicted to grow by a further 4.4 per cent and by 2014 the numbers are likely to reach almost 37,000. Activity centres, identified in the Melbourne 2030 Strategy, located mainly in Williamstown, Altona North and Altona will accommodate around 50 per cent of future residential growth. In addition, the Industrial Land Management Strategy, adopted by the Council in 2008, identifies strategic redevelopment sites for future residential development. A number of under-utilised and redundant industrial sites in the municipality have been earmarked for potential housing development, particularly in Altona North, Spotswood, South Kingsville and Williamstown North.

The age profile of Hobsons Bay is relatively older than the western metropolitan region as a whole. Hobsons Bay has a lower proportion of children, young people and younger adults (0-34 years) and a higher proportion of residents aged 60 years and over. Between 2001 and 2006, the largest growth was among residents aged 35-59, with 29.8 per cent of residents aged 50 years and an increase in residents over the age of 60 years. This ageing of the population is consistent with state and national trends.

Changes within the age structure are anticipated. Areas such as Altona Meadows and Seabrook, which have provided housing opportunities for young families, have started to transition to maturing families. As a result, the number of families without dependants and lone person households will increase in these areas. In contrast, Altona North and Altona have been home to a higher proportion of older residents. Altona North, most noticeably, will begin to regenerate. Further change in the age structure will be driven by housing growth on former industrial sites which will attract new families to the city.
The Hobsons Bay municipality has a high level of cultural diversity with 29.1% of the population born overseas and 28.1% of residents speaking a language other than English. The main countries of birth of Hobsons Bay residents (other than Australia) and the main languages other than English spoken are shown in Figure 9 and 10 respectively.

![Places of birth](image1)

Figure 9: Main countries of birth of Hobsons Bay residents (other than Australia)

![Main languages spoken other than English](image2)

Figure 10: Main languages other than English spoken

(Sources: Hobsons Bay City Council Multicultural Policy and Action Plan 2008-2011, Hobsons Bay City Council annual Budget 2011/2012 and Population Forecasts prepared by .id consulting for Hobsons Bay City Council, Hobsons Bay City Council Annual budget 2011/2012 Statutory Disclosures Appendix B)

This housing growth, change in number of people per household and increasing age and diversity of the community will have impact on waste and litter management services. Therefore the need to plan this
waste management services in these growth areas is important and structure future services that meet community needs.

Waste management services including those to developments are discussed further in section “Waste Management in Hobsons Bay”.

**Non-Residential Profile**

The local economy includes chemical and petroleum industries, light industrial, manufacturing, and transport and goods distribution companies, together with service industries. The main industries of employment for residents are manufacturing, retail, health care and social services. Their main occupations are professionals and intermediate clerical, sales and service workers. Within the municipality, manufacturing industries provide over 8,000 (28 per cent) of the city’s 29,600 jobs and employ 31 per cent of Hobsons Bay residents. The highest concentration of businesses by Industry sector is Property and Business Services, Construction and Retail.

The following table illustrates the type of non-residential properties in Hobsons Bay.

<table>
<thead>
<tr>
<th>Type of Property 2011/2012</th>
<th>2011/2012</th>
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<tbody>
<tr>
<td>Commercial</td>
<td>1,270</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,489</td>
</tr>
<tr>
<td>Petro Chemical</td>
<td>22</td>
</tr>
<tr>
<td>Cultural and Recreational</td>
<td>39</td>
</tr>
<tr>
<td><strong>Total number of assessments</strong></td>
<td><strong>2,820</strong></td>
</tr>
</tbody>
</table>

Table 10: Number of types of properties in Hobsons Bay (Source: Hobsons Bay City Council Annual budget 2011/2012 Statutory Disclosures Appendix B)

Commercial properties that pay a waste charge within their rates are entitled to participate in the waste service including the hard waste collection service. The Council provides some waste and recycling services to the commercial and industrial for ‘lunch room’ and small office type waste where the municipal service does not impact amenity and bins are managed and stored appropriately. The hard waste service is permitted to commercial properties for residential type hard waste. Excess packaging waste or non-domestic type waste will not be collected. It is difficult to provide the municipal waste service to shopping centres which have a higher level of waste management needs. It is estimated that most small businesses utilise the Council’s services including businesses in the main shopping precincts however
data is incomplete.

Approximately 205 commercial properties use a Saturday Commercial Cardboard Collection Service. Up to one cubic metre per commercial property of bundled cardboard is permitted to be placed out for a Saturday morning collection. Predominantly this is used in Altona, Williamstown and Laverton shopping precincts. This is service is at no additional cost.

The Council also provides limited municipal waste services, mainly recycling services, to community facilities upon request.

In Hobsons Bay there are a range of community services and facilities including:

- 49 general community services including: community centres, libraries, community information centres, meeting spaces
- 55 children’s and family services including: maternal and child health centres, kindergartens, child care centres and toy libraries
- 36 education facilities including: public and private primary and secondary schools, tertiary institutions
- seven arts and cultural facilities including: community arts spaces, community theatre, arts and cultural spaces, arts centres
- two major health facilities including: community health services, hospitals
- 40 older years and disability services including: nursing homes, elderly persons units, planned activity groups, private residential facilities, senior citizens centres, community transport service, residential aged care facilities, social support groups
- three service for young people including: housing support service, youth resource centres

(Source: Hobsons Bay City Council, Community Services and Infrastructure Plan, Discussion Paper, Prepared by K2 Planning)

Most Council owned and managed community buildings are provided with a commercial type garbage service through it Facilities Maintenance team.

There are approximately 120 sports clubs located within the municipality, some sharing 67 recreational facilities. There are two Council owned but not managed aquatic and leisure centres, five regional sports facilities, approximately 14 foreshore based clubs or facilities, three golf clubs and a number of private owned facilities including three fitness centres, two indoor sports centres and two swim schools.

Most recreational facilities and reserves are provided litter removal services from bins and manual cleanups by the Council’s City Maintenance and Cleansing Team. Sporting clubs are eligible to use the Council’s recycling service only to promote recycling at clubs. Allowances include two recycling bins. Additional services are at an extra cost.
Schools are eligible to use the Council's recycling service only to promote recycling at schools. They are allowed up to three recycling bins collected fortnightly. Additional services are at an extra cost to the school.

Community centres, kindergartens, senior citizen centres, child care and libraries are eligible to use the waste service. Allowances include two garbage and recycling bins and one garden waste bin. Additional services are at an extra cost.

Additional garbage, recycling and bins are available at an additional cost where the allocated service level for commercial and community facilities are insufficient. There are no defined limits to the number of bins one property can obtain and pay for. However, limitations apply where insufficient kerbside space restricts collections, parking and reduces the amenity of the area. This is assessed on a case by case basis.

The non-residential service parameters were established during the introduction of the Council’s recycling and garden waste collection program in February 2004.

Approximately 65 recycling services and 57 garbage services are provided to community and recreational types of properties (2011). However, data is inaccurate and predominantly multiple recycling and garbage bins are provided to these types of properties where the groups of users are dissimilar.

The Council would benefit from establishing with greater accuracy the number of services provided to non-residential properties and developing a policy for the provision of municipal waste services. Until such time this data is available the Council should continue to provide municipal waste services to community facilities such as aged and child care, schools, churches, community centres and recreational centres. (Action Item 10.1)

Some challenges of providing waste management services to non residential properties are discussed further in section the following sections.

Hobsons Bay City Council’s Waste and Litter Management – Status

The Council’s role and responsibilities regarding waste and litter are limited to municipal solid waste and litter. It provides direct waste and litter services and maintains a depot to operate litter management services from. The Council has a role to engage and educate all sectors of the community to reduce waste and litter with particular focus on householders. Local Laws focus on appropriate management of waste and litter within all sectors.

The Council’s operations do not extend to managing construction and demolition waste or the
management of operating landfills. It does have a role in local planning policies relevant to development and the use of resources during construction, demolition and use of land. The Council’s role within the commercial and industrial sectors is limited to those businesses utilising the Council’s municipal waste services.

The following sections provide an overview of services provided and areas of improvement.

**Waste management in Hobson Bay**

**Waste Services**

The current three bin system, shown in Table 11, of a weekly 120 litre garbage, 240L fortnightly recycling and 120 or 240 litre fortnightly garden waste collections was introduced into Hobsons Bay in February 2004. Material from each bin is handled in different ways as described.
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<tbody>
<tr>
<td>Mobile Garbage Bin type</td>
<td>Dark green lid 120 litre capacity</td>
<td>Yellow lid 240 litre capacity</td>
<td>Light green lid 120 litre or 240 litre capacity</td>
<td>No bin; three cubic metres in total</td>
<td>No bin; one cubic metre in total per participating business</td>
</tr>
<tr>
<td>Recycling or disposal site</td>
<td>Disposed to Wyndham land fill. Regionally brokered external contract.</td>
<td>Recycled at a Materials Recovery Facility (MRF) owned by SKM Recycling in Laverton North. To be sorted and reprocessed into new products. Contracted by the Council.</td>
<td>Recycled to produce compost and mulch at SITA Environmental in Brooklyn. Regionally brokered external contract.</td>
<td>Timber, metals, garden waste and mattresses are recovered at Calleja, Altona North, for recycling. The remaining is disposed to land fill. Subcontracted through the Council’s hard waste collection contractor.</td>
<td>Recycled by subcontract through the recycling collection service provider. Contracted by the Council.</td>
</tr>
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</table>

Table 11: the Council’s 2012 municipal waste services
The previous system, prior to February 2004 incorporated the following elements:

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</thead>
<tbody>
<tr>
<td>Mobile Garbage Bin type</td>
<td>Dark green lid</td>
<td>60 litre crate and bundled and tied paper and cardboard</td>
<td>No bin; bundled and tied garden waste</td>
<td>No bin; one cubic metres in total</td>
<td>No bin; one cubic metre in total per participating business</td>
</tr>
</tbody>
</table>

Table 12: the Council’s municipal waste services prior to February 2004
Additional garbage, recycling and bins are available at an additional cost where the allocated service level for residential and non-residential properties is insufficient. There are no defined limits to the number of bins one property can obtain and pay for. However, limitations apply where insufficient kerbside space restricts collections, parking and reduces the amenity of the area. This is assessed on a case by case basis.

The Council tendered and awarded the hard waste collection service and the recyclables processing service. Both these services commenced in June 2011.

Improvements to the hard waste service included the recycling of timber, metal, garden waste and mattresses. At the time of the tender the Council sought proposals for the separation of hard waste products in hard waste collection services into reusable, recyclable and disposable items, however it was too cost prohibitive. The booked hard waste service complies with WorkSafe Victoria’s Occupational Health and Safety (OH&S) guidelines specific to the waste industry. The Council will continue to provide an annual booked hard waste collection service available to households once per financial year and continue to review reuse and recycling opportunities during each retender. (Action Item 8.2)

In January 2011, the Council tendered the recyclables acceptance and sorting service (2011.30) (the Recyclables Contract) and awarded it to SKM Recycling on 3rd May 2011. The Recyclables Contract is for the receipt and processing of recyclables collected from the Council’s fortnightly recycling collection service. The previous contractor since February 2004 was VISY Recycling. SKM Recycling is working with the Council to add more products to the list of recyclable items to increase resource recovery and reduce waste to landfill. As products are added a communications program will be implemented to announce the improvements.

With respect to reviewing recyclables, garbage and garden waste services, the Council was awaiting the outcomes of the VARRI business case to determine future services and effectively plan for these in new contracts. The VARRI business case was not available at the time of writing this Plan.

The original seven year term of contracts for the collection of recyclables, garbage and garden waste have ended and contracts are in extension periods, the two of three one year extensions being exercised at the time of this Plan until February 2013. The Council has retendered these contracts in March 2012 with the same service makeup and minor improvements that are relative to current local government tenders and technology such as global positioning systems, scales to weigh bins, and reporting systems within the collection vehicles.

Benchmarking with other Council’s recently tendered suggests that the contract rate provided to the Council is very competitive. However, maintenance issues on older waste collection vehicles gave reason for the Council to retender, rather than extend for the final year as allowed under the contract, to
ensure service continuity.

The current system is compliant with 2001 Preferred Standard. The Council received $285,592 in State Government funding from an approximate $9 million funding allocation to introduce the fortnightly commingled recycling system moving from a weekly crate and bundle based manual collection. The average funding allocation was $272,000 per council.

The range of materials that were collected included glass bottles and jars whether broken or unbroken, PET, HDPE, PVC, aluminium cans and foil, steel cans, paper and cardboard, and liquid paper board.

Table 13 is performance data at June 2005, 17 months after the introduction of the 2001 Preferred Standard:

<table>
<thead>
<tr>
<th>2000 Preferred Standard</th>
<th>Performance at June 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>A collection and sorting cost of between $25 and $35/household/year</td>
<td>$21.58</td>
</tr>
<tr>
<td>A collection and sorting cost of less than $150/tonne/year</td>
<td>$77.13</td>
</tr>
<tr>
<td>A minimum recycling yield of at least 3kg/week/households</td>
<td>5.52</td>
</tr>
</tbody>
</table>

Table 13: Performance of the Council’s recycling service at June 2005 (Source: Hobsons Bay City Council)

Table 14 is performance data at June 2011 compared to the 2004 Preferred Standard, more than seven years after the introduction of the Preferred Standard:

<table>
<thead>
<tr>
<th>2004 Preferred Standard</th>
<th>Performance at June 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>A collection and sorting cost of up to $45/household/year for metropolitan councils</td>
<td>$24.62</td>
</tr>
<tr>
<td>A collection and sorting cost of up to $170/tonne/year for metropolitan councils</td>
<td>$93.86</td>
</tr>
<tr>
<td>A minimum recycling yield of at least 3.5kg/week/households</td>
<td>5.04</td>
</tr>
</tbody>
</table>

Table 14: Performance of the Council’s recycling service at June 2005 (Source: Hobsons Bay City Council)

The Council is meeting these 2004 Preferred Standard, with the exception of standard bin colours and some exceptions to service provision to multi unit developments. Service provision to multi unit developments is discussed further in later in this section. The performance of the service against Towards Zero Waste and other Councils is discussed later in this section.
Recyclables and garden waste lids are consistent with preferred colours. Garbage bin lids are dark green and not consistent with the preferred red lid colour. However it is considered financially unviable at this time to alter bin lids compared to investment in other waste and litter initiatives. At the time of this Plan there was no funding to assist Councils to standardise bin lids and the MWMG was seeking State Government financial support through reinvestment of the landfill levy funding in addition to other metropolitan waste priority areas. The Council will assess future bin colour standardisation activities at the metropolitan level as the need arises. (Action Item 8.4)

The domestic kerbside recycling, garbage, garden and hard waste services are designed to comply with WorkSafe Victoria’s Occupational Health and Safety (OH&S) guidelines specific to the waste industry.

Figure 11 shows the amount of waste in tonnes collected in municipal waste collection services. The graph highlights that that waste generation in Hobsons Bay is a growing issue, as it is anywhere in Australia. From 2000/2001 to 2010/2011 waste generation rose by 30 per cent.

Figure 12 shows the variation in the amount collection in each type of service. It illustrates a decline to 2009/2010 in waste being sent to landfill in the garbage stream and a steady increase in tonnes collected in recycling and garden waste services. Recently from 2009/2010 to 2010/2011 waste collected rose by 12.9 per cent. With respect to each service and the change from 2009/2010 to 2010/2011, land filling rose 17.55 percent, recycling dropped 8.05 per cent and garden waste increased by 45.60 per cent. Yearly percentage changes are shown in Table 15 for all services combined and individually.

In 2010/2011 the Council experienced an increase in garbage and garden waste tonnes collected. The garden waste spike was due to seasonal weather fluctuations. The increase in garbage collected could also be attributed to this same reason as it is likely those residents that have garden waste services exceeded the garden waste bin’s capacity depositing the excess into garbage bins. Or those that did not have garden waste services deposited garden waste into garbage bins as they may have always done but more was deposited during this peak season.

The increase in recycling and garden waste tonnes collected shown in 2004/2005 data can be attributed to the introduction of the fortnightly recycling and garden waste services in February 2004 and the subsequent increased use.
Figure 11: Total waste in tonnes collected each year in Hobsons Bay 2001/2002 to 2010/2011 from all municipal waste collection services (Source: Hobsons Bay City Council).

Figure 12: Total waste in tonnes collected in Hobsons Bay 2001/2002 to 2010/2011 from each municipal waste collection services (Source: Hobsons Bay City Council).

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Total garbage in tonnes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total recycling in tonnes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total greenwaste in tonnes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total hard waste in tonnes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 15: percentage change in waste collected in tonnes from previous financial years in all municipal waste collection services (Source: Hobsons Bay City Council)

Figure 13 illustrates the trend in solid waste generation and recovery relative to Hobsons Bay population changes and shows this trend for metropolitan Melbourne councils. Data includes municipal solid waste only.
Figure 13: trend in solid waste generation and recovery relative to Hobsons Bay and metropolitan Melbourne councils

The data shows a similar trend for Hobson Bay and Metropolitan Melbourne. The Hobsons Bay community prior to 2005/2006 were performing better than Metropolitan Melbourne in terms of generating less waste ranging from 28 to 38 kilograms per person per year below Metropolitan Melbourne levels during the period from 2001/2002 and 2004/2005. Hobsons Bay also performed better than Metropolitan Melbourne in terms of recovering more waste ranging from 25 to 35 kilograms per person per year during the same period. Thereafter Hobsons Bay generated more and recovered less waste ranging from 0.2 to 9 kilograms of waste generated per person above Metropolitan Melbourne levels and 3 to 8 kilograms per person per year less waste recovered than Metropolitan Melbourne.

Of the total waste generated in Victoria, Victorian households contribute close to 25 per cent of all generated waste and almost 40 per cent of waste sent to landfill. Garden and food wastes represent around 50 per cent of the weight of household garbage (The Towards Zero Waste Strategy, Sustainability Victoria, 2005).

As demonstrated in Figure 12 the overall percentage of Hobsons Bay domestic waste being sent to landfill has dropped from just under 70 per cent in the 2000/2001 financial year, to under 60 per cent
during 2010/2011. This trend was encouraging as it meant more of the municipality’s waste was being diverted from landfill. However, this figure does not necessarily indicate that more people are recycling, as total waste generation has increased in the same period, indicated in Figure 11. The spike in 2010/2011 could be attributed to the increase in garden waste production during a heavy rainfall year and the disposal of this material in garbage bins where a property does not have a garden waste bin or if they do it is at capacity.

The Hobsons Bay community have met the Towards Zero Waste’s interim target of 45 per cent for 2008/2009 financial year with 45.63 per cent recycled through the Council’s recycling and garden waste service. The challenge was to reach the 65 per cent recovery target by 2014 set by the State and contribute to waste avoidance targets. With the Victorian Waste Policy being reviewed, new targets are likely to be established. The Council will review these targets and consider their adoption (Action Item 3.3).

The Council’s primary focus and area of control is to provide services that recycle and recover resources. However, further waste avoidance and reduction initiatives are required. The Council should with State, MWMG and other Councils develop waste avoidance programs targeting municipal waste (Action Item 8.3).

Diversion of organic materials to marketable soil conditioning, water conservation and renewable energy would reduce greenhouse emissions and provide environmentally beneficial products. Currently, only about 20 per cent of municipal organics are recovered (The Towards Zero Waste Strategy, Sustainability Victoria, 2005).

The following table shows how each service is performing with some comparison to metropolitan Melbourne Councils. Data from 2009/2010 has been used as this is the latest Victorian data available.

![Figure 14: Household waste diversion from landfill rates 2000/2001 to 2010/2011 (Source: Hobsons Bay City Council)](image)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of residential premises serviced by the Council’s waste service 2009/10</td>
<td>34,791</td>
<td>34,791</td>
<td>23,162</td>
<td>Available to 34,791 (5,397 collections undertaken)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Number of non-residential premises serviced by the Council’s waste service 2009/10</td>
<td>2,769</td>
<td>2,769</td>
<td>263</td>
<td>Not applicable</td>
<td>Approximately 250</td>
<td></td>
</tr>
<tr>
<td>Annual tonnes collected 2009/10 (Council)</td>
<td>17,530</td>
<td>10,591</td>
<td>4,701</td>
<td>810.7</td>
<td>Approximately 220</td>
<td></td>
</tr>
<tr>
<td>Annual yield per household and non-residential premises (kg) 2009/10 (Council)</td>
<td>466</td>
<td>282</td>
<td>200</td>
<td>150 (for collection undertaken)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Annual yield per household and non-residential premises (kg) (metropolitan councils) 2009/10</td>
<td>489</td>
<td>289</td>
<td>307</td>
<td>31 (inner metropolitan comparison only)</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Average participation rate at June 2010 (Council)</td>
<td>92 per cent</td>
<td>83 per cent</td>
<td>58 per cent who have access to the service. 62 per cent of household have opted into the service.</td>
<td>14.5 per cent (5,397 collections 2008/09)</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Average contamination rating (Council)</td>
<td>Not applicable</td>
<td>3.3 to 4.3 per cent</td>
<td>Between 5 and 10 per cent</td>
<td>Not applicable</td>
<td>Minimal because a collection is rejected if there is evidence of contamination</td>
<td></td>
</tr>
<tr>
<td>Annual cost of the service 2009/10 (Council)</td>
<td>$1,975,093</td>
<td>$885,760</td>
<td>$735,174</td>
<td>$210,045</td>
<td>$24,000</td>
<td></td>
</tr>
<tr>
<td>Annual cost of the service per household and non-residential premises 2008/09 (Council)</td>
<td>$64.67</td>
<td>$23.47</td>
<td>$31.38</td>
<td>$6.04</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Average annual cost per household and non-residential premises 2009/10 (metropolitan councils)</td>
<td>$64.67</td>
<td>$28.15</td>
<td>$41.98</td>
<td>$6.88 (inner metropolitan comparison only)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Cost per tonne 2009/10 (Council)</td>
<td>$112.67</td>
<td>$83.63</td>
<td>$156.39</td>
<td>$259.09</td>
<td>$109</td>
<td></td>
</tr>
<tr>
<td>Cost per tonne 2009/10 (metropolitan councils)</td>
<td>$132.18</td>
<td>$97.48</td>
<td>$136.72</td>
<td>$221.74 (inner metropolitan comparison only)</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

Table 16: Waste management services in Hobsons Bay and comparisons to metropolitan councils during 2009/2010 (Sources: Hobsons Bay City Council and Sustainability Victoria Victorian Local Government Annual Survey 2009-2010) Note collection systems across metropolitan Melbourne differ particularly with garden waste services vary with frequency of collection and sizes of bins and hard waste services which vary in collection frequency and type of collection. More detail can be gathered from Sustainability Victoria’s Victorian Local Government Annual Survey 2009-2010.
In 2004/2005 the Council collected approximately 2.6 million bins (June 2005). In 2009/2010 this had risen to 2.9 million bins (June 2010).

With respect to the community’s satisfaction with the municipal waste service, each year the Department of Planning and Community Development (DPCD) commission the Local Government Community Satisfaction Survey to track residents’ views on its performance over time using a sample size of 350 people. In its fourteenth year the report identifies some key areas for improvement for increasing resident satisfaction for the coming year for Victorian Councils. With respect to waste management the Council scored 75 in 2011 unchanged since 2010 but higher than all Councils and similar for inner Councils. The highest rating for inner metropolitan councils was 79 percent and the lowest 71 per cent. The Council’s overall rating was 66 per cent. Inner Councils comprise Banyule, Bayside, Boroondara, Darebin, Glen Eira, Hobsons Bay, Kingston, Maroondah, Melbourne, Monash, Moonee Valley, Moreland, Port Phillip, Stonnington, Whitehorse and Yarra.

47 per cent of respondents stated performance was good, and 24 per cent stated it was excellent resulting in DPCD’s report recommending the Council should maintain performance in waste management. The top three areas for improvement identified by 43 respondents, where more frequent hard waste collections (35 per cent), reintroduction of tip vouchers (21 per cent) and more reliable collections (21 per cent). (Source: Local Government Community Satisfaction Survey 2011, Hobsons Bay City Council May 2011, Wallis Consulting Group, Department of Planning and Community Development)

Garden waste services are provided on an optional user pays basis. In 2003/3004 when the fortnightly bin based service was introduced, there were 18,929 properties registered to use the garden waste service. As of 2008/2009 22,731 properties had registered to use the service. In 2009/2010 this figure rose to 23,425 due to a warmer and wetter year than normal and therefore increased grass and plant growth.

Contamination in the garden waste service is an issue, with the Council having to devote approximately $27,000 (2009/2010) of the total garden waste service budget to contamination removal. In 2010/2011 this rose to approximately $40,000. Most contamination is plastic bags and domestic renovation materials including asbestos or syringes. It is envisaged future contracts will improve the contract conditions for the Council with regard to contamination. As with contamination within the recycling service, any garden waste contamination is to be avoided to maximise resource recovery potential. The Council should work with the MWMG and service providers, to reduce contamination developing a community education and enforcement program. A bin compositional audit and audits of garden waste in collection vehicles will also help with determining the primary areas for focus of such a campaign. Neither are undertaken at the time of this Plan. (Action Item 8.5)
Contamination in the recycling stream is not an issue from a cost perspective as at the time of this Plan the contracted conditions did not include payments to the contractor. However, the Council and the community have a responsibility to improve the quality of the recyclables to ensure quality and market for end product is sustained. Examples of end product include recycled bottles, cans, construction materials and park furniture. Common contamination items include plastic bags, soft plastic wrapping and polystyrene. Audits of recyclables collected in recycling vehicles commenced November 2011 as part of the recycling processing contract. These results and a bin compositional audit will contribute to the development of a community education campaign to reduce contamination and improve the quality of recyclables. Bin compositional audits were not undertaken at the time of this Plan (Action Items 8.5 and 8.6)

**Community Local Laws: waste management**

The Council’s Community Local Law (Local Law) addresses the following waste management and related issues:

- Municipal waste from premises supplied with a kerbside service provided by the Council is controlled through Clause 67 in the Local Law and aim to assist the Council to provide an efficient service that maximises resource recovery reducing the likelihood of the wrong materials being placed in bins and maintain neighbourhood amenity and safety. The circumstances that are controlled include length of time of bin placement on nature strips, interference with services, damaged, lost or stolen bins, the use of the service by flats or units, the type of waste to be placed in each type of bin, overfilling, cleanliness and containment of waste (Clause 67).

- Privately supplied commercial waste services are controlled through the Local Law in circumstances including placement for collection, specification, storage and cleanliness of trade waste bins (Clause 69, 70 and 71).

(Source: Hobsons Bay City Council, Community Local Law, effective 1st April 2011)

These local laws are used by the Council in circumstances where non-compliance is an ongoing issue. The Council should continue utilising the local laws in this way and seek to improve and refine them and internal processes at the time of the Local Law review (Action Item 9)
Waste services to non residential properties and multi unit developments

As previously mentioned, the Council provides some domestic garbage and recycling services to small businesses for office and lunch waste disposal and community facilities such as aged and child care, schools, churches, community centres and recreational centres. Where access to mobile recycling bins is feasible, and if requested by a sporting club or community centre, the Council will provide kerbside recycling services to these facilities. This service assists the clubs with reducing their waste sent to landfill by allowing the recovery and recycling of resources. However, the Council's standard level of municipal waste service is limiting and often not appropriate to the facilities needs. The Council would benefit from establishing with greater accuracy the number of services provided to non-residential properties, assess alternative service options other than the municipal waste service, and the creation of clearer Council specific policy guidelines to demonstrate its needs to the community.

The Commercial Cardboard Collection Service, although underutilised, is in need of a review to assess compliance with manual handling. The frequency, volumes and nature of the cardboard restricts combining this collection service with the existing domestic recycling mobile bin and fortnightly service. Many small businesses are already using the domestic kerbside recycling service. As the service is on a Saturday morning in tourism and shipping precincts, many traders place cardboard out the night before collection, causing amenity and windblown litter issues. The service requires a review for these reasons and therefore will be investigated in new collection service tenders. An interim measure that the Council should investigate is continuing to provide the standard level of service on a weekday rather than a weekend. (Action Item 10.2)

A current and increasing challenge for Hobsons Bay is providing adequate waste management services to multi unit developments. This is an issue of great importance to inner city councils. Sustainability Victoria has developed Guide to Best Practice for Waste Management in Multi-unit Developments (October 2010) which assist those involved in designing, planning, developing, building and managing multi-unit developments (MUDs) to incorporate best practice waste management into all stages of a development’s life. It outlines essential points to consider when designing a waste management system for medium or high density residential, mixed-use and integrated housing developments. The Council utilises these guidelines recommending to multi unit developers through the planning process that the guide be used to develop a waste management plan for the site. Waste management plans are then part of the planning permit conditions. The Council provides its standard service having consideration for the impact on community safety, noise, traffic
congestion, and amenity. Developers will sometimes suggest an alternative private service because the development cannot meet with the requirements of the Council's municipal waste service or planning conditions. The Council should create clearer Council specific policy and guidelines to demonstrate its needs to the development community and investigate alternate municipal waste service options for residential multi unit developments. (Action Item 10.3)

**Waste reduction and resource recovery initiatives**

As total waste generation increases other initiatives for reducing waste to landfill are becoming important. This includes community engagement, reducing bins sizes and investing in technology to avoid waste to landfill. Community engagement activities are discussed in later in this section.

Reducing the size of garbage bins and increasing the size of recycling bins with a corresponding waste charge for different sized services, is accepted Victorian practice to reduce waste to landfill and increase recycling. This type of initiative is often a politically sensitive and highly resource intensive proactive to introduce and requires thorough research, planning and community consultation.

The 120L garbage bins are the most predominant bin in most Council’s (63 per cent) except in major provincial local governments where the predominant collection system is a 140L bin. The largest garbage bin (240L) is still used by four (5 per cent) local governments. Most of these bin systems are weekly collection services.

Table 17 shows how yields and costs are affected by the size of the garbage collection system employed.

<table>
<thead>
<tr>
<th>Collection system</th>
<th>Cost per tonne</th>
<th>Cost per household</th>
<th>Household yield (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80L</td>
<td>$169.11</td>
<td>$69.52</td>
<td>411</td>
</tr>
<tr>
<td>120L</td>
<td>$144.24</td>
<td>$66.97</td>
<td>464</td>
</tr>
<tr>
<td>140L</td>
<td>$132.28</td>
<td>$72.05</td>
<td>545</td>
</tr>
<tr>
<td>240L</td>
<td>$157.08</td>
<td>$91.91</td>
<td>585</td>
</tr>
<tr>
<td>State average</td>
<td>$144.87</td>
<td>$68.82</td>
<td>475</td>
</tr>
</tbody>
</table>

Table 17: Garbage average yields and costs by collection system, Victoria 2009–10 (Source: Sustainability Victoria’s Victorian Local Government Annual Survey 2009-2010).
The implementation of a smaller bin system by local governments is one alternative to reduce the amount of garbage generated.

Other councils are considering or have implemented smaller garbage bins in the effort to reduce waste to landfill from householders and larger recycling bins to increase recycling.

A few councils, such as Moonee Valley, have also piloted or continue to offer collections of household reusable goods from recycling bins the day after regular fortnightly recycling collections. Termed “day after collections” in the local government waste industry, the items collected include textiles, clothing and accessories and toys, which are diverted from the garbage stream, and therefore from landfill, to a range of charities. Other Council’s have ‘tip shop’ or ‘reverse garbage’ centres predominantly located at their landfills or transfer stations. The Council does not have such a centre nor does it own or operate a landfills or transfer station. However, the option could be explored at an alternative site or in partnership with community groups.

The Council should investigate these options to reduce waste to landfill and provide reuse opportunities. (Action Item 11.1, 11.3 and 11.4)

The composition of the Victorian municipal garbage stream, discussed earlier in the Plan, shows a high percentage of food waste (42 per cent), garden waste (5 per cent) and recyclables (17 per cent).

With respect to food waste, the Council should advocate to the MWMG and State Government for research on ARRT to enable effective long term planning and localised collection service reviews that accommodate future waste technology advances. Alternatively it should seek to collaborate with other council on similar research (Action Item 4.1).

With respect to garden waste and recyclables, the Council should review services and develop community education programs that aim to reduce waste generation and recover these materials from the garbage stream (Action Item 11.5). The MWMG have an “improving kerbside recycling” program that approximately 22 of the 30 metropolitan councils have committed time and funding to. The Council should consider this and similar programs (Action Item 11.6). The Council should also work with the recycling and garden waste processing contractors and MWMG to improve the quality of recycling and garden waste and increase diversion from landfill (Action Item 11.5 and 11.7). It would also be important for the Plan’s evaluation to audit the municipal waste bin system on a regular basis to determine any change in composition. The Council should advocate to the State Government and MWMG to undertake these audits at Victorian and metropolitan level and consider its own auditing activities (Action Item 3.1). Garden waste services of an optional nature
should also be reviewed to consider compulsory garden waste services to increase garden waste recovery from the garbage waste stream (Action Item 11.3).

Until technology become available and research completed that concludes the best approach to municipal waste services, the Council should continue to provide garbage, recycling and garden waste services, looking for minor service improvements in each new tender and includes options for tenderers to provide proposals for food waste collections and services to commercial properties and multi unit developments (Action Item 8.1).

**Community engagement and education: waste**

The Council has a responsibility to ensure its community is well informed and is provided with opportunities to reduce waste, recycle and take responsibility for managing its own waste and litter.

The Council has provided, or is currently providing, the following waste related community education and engagement programs, events and initiatives:

- **My Smart Garden**—this program is a current flagship program of Hobsons Bay and Moonee Valley City Councils. It has been designed to instil a culture of gardening as a valuable resource for dealing with the changing climate and is based around four main themes of growing food, sheltering homes from the sun and wind, creating homes for local wildlife, and using water wisely. The intent is to reduce greenhouse gas emissions and waste, enhance biodiversity and increase sustainable water management. The long-term vision of My Smart Garden is that the majority of homes in Melbourne have Smart Gardens and the mainstream media actively reports on the environmental benefits of Smart Gardens. That local business such as nurseries and hardware stores understand the benefits of, and promote Smart Gardens to their customers, and the program has helped communities adapt to climate change by reducing household greenhouse gas emissions, improving local biodiversity and using water wisely.

- **Yummy Yards Workshop Series** —In partnership with Sustainable Gardening Australia, Hobsons Bay City Council hosted two Yummy Yards workshop series, focusing on how to design and maintain a successful produce garden throughout the year. The workshops also encouraged residents to minimise waste through setting up home composting and worm farming.

- **Healthy Sustainable Gardens Program** —This program coordinated by the MWMG provided residents with access to mulch and compost sourced from local garden waste collections at discounted rates. Through this program, residents ‘closed the loop’ by buying back locally produced mulch and compost.

- **Environment Calendar** —Hobsons Bay City Council produced and distributed an *Environment Calendar* for all residents in 2007. As well as providing basic information about kerbside rubbish and recycling services, the calendar provided residents with information about sustainable living,
including waste and litter management. The calendar has not been repeated due to feedback from the community that suggested the calendar was not useful.

- Environmental Ambassadors and Environmental Workshops Program – Hobsons Bay City Council worked with Swinburne University to provide residents with an opportunity to become local leaders for sustainability and attend a number of workshops about key sustainability issues.

- Support for Australian Sustainable Schools Initiative (Resource Smart) Vic - Hobsons Bay City Council has provided support to two schools within the municipality to undertake the AuSSI Vic Core Module in 2009/2010. This Module will provide schools with an opportunity to assess their current environmental performance, gather data and undertake good sustainability planning across the whole school. Completion of this module will provide a springboard for participating schools to move onto other AuSSI Vic Modules, including the Waste Module.

- Various Environment Resource Centre Workshops – Hobsons Bay City Council’s Environment Resource Centre (located at the Altona Library) annually hosts four sustainability workshops. Workshops have included sustainable gardening, composting, sustainable consumption, climate change and much more.

- Living Green in Hobsons Bay Guidebook – The Council launched the Living Green in Hobsons Bay Guidebook in the 2009/2010 financial year. The Guidebook will assist residents to move further towards sustainable living and provides lots of locally based information about organisations, community groups and businesses which can assist them.

- Mama Green Workshop Series – The Council worked in partnership with Tanya Ha, a local sustainability champion to deliver an eight week environmental workshop series for parents of young children.

- Coordinating Hobsons Bay Teachers Environment Network – The Council coordinates and facilitates a quarterly Hobsons Bay Teachers Environment Network meeting. The purpose of the meetings is to provide teachers with an opportunity to share what is happening in their school as well as to inform them of resources available to assist schools to integrate sustainability into their teachings. Litter and waste management have proven to be areas of major interest to local schools.

- Living Green in Hobsons Bay eNewsletter – This quarterly newsletter keeps local residents and businesses up to date with sustainability programs undertaken by the Council and in the community. It also keeps residents informed up upcoming sustainability events.

- Community festivals – The Council’s environment unit attend local festivals and events to raise awareness of sustainability issues, including waste and litter.

The list above is a snapshot of the waste related community engagement activities that are undertaken.
Other environmental engagement activities are undertaken in a variety of ways and degrees across the Council including Community Development, Parks, and Arts, Tourism and Events, Recreation, Libraries, Family, Youth and Children’s Services departments. Activities are undertaken largely on a reactive opportunistic basis with little meaningful objectives or programs that can be sustained.

In response, the Council is developing an Environmental Engagement Strategy to gain a comprehensive understanding of the type and scope of community environmental engagement that has occurred in the past and that is currently occurring. The strategy aims to understand community expectations, provide program links to National, State and Local policy objectives, develop consistent messaging and processes across the Council and develop meaningful community engagement activities that promote and encourage behaviour in support of a sustainable environment. Sustainability themes that will be addressed include water, stormwater, energy, climate change, waste, litter and biodiversity. The Strategy will address internal staff programs also.

The Council should continue to provide community engagement and education on waste avoidance and recycling initiatives (Action item 12)

Behavioural change programs will be developed to address the above issues and consideration will be given to any highlighted in the development of the Environmental Engagement Strategy.

**Other waste services: Lighting recycling program**

Other waste services provided by the Council include the lighting recycling and Waste Wise events programs.

The lighting recycling program is a pilot partnership with between the Council, Bunnings Altona, the local community access point and Chemsal Pty Ltd, the lighting recycler.

Since commencement in February 2010, the program has recycled approximately 350 kilograms of lighting. Lighting recycling facilities can be found at Bunnings Altona, 290-298 Millers Road and Chemsal Pty Ltd 83 Doherty’s Road, Laverton North. The following lighting is currently accepted for recycling:

- compact fluorescent lights (CFL’s);
- standard incandescent light globes;
- traditional straight fluorescents;
- circular, U-shaped and coated fluorescents;
- high pressure mercury vapour lamps;
- high pressure sodium vapour lamps;
- metal halide, ultraviolet and voltaic arc lamps; and
- dichroic lamps (eg: down lights).
This Council service is in need of increased promotion, review and consideration of expansion to other areas (Action Item 13.1).

![Image](image.png)

**Figure 15: Lighting recycling program at Bunnings Altona**

**Other waste services: Events waste management and recycling**

With respect to events, the Council provides waste and litter management service to a variety of events and by application through the Council’s special events package. Costs for providing waste and litter management at events are borne by the event organiser. Where recycling and resource efficient practices are requested by event organisers or encouraged by the Council, the Council has provided it through the State Government’s former Waste Wise Events program, and provided support with recycling infrastructure, services and promotional assistance. The Waste Wise Events program originated from EcoRecycle Victoria, the former Sustainability Victoria and was a step by step program that certifies events as Bronze Silver or Gold from 2004 to 2009.

The Metropolitan Regional Waste Management Group and Sustainable Living Foundation now promote the Sustainable Events Planner that includes much of the resources made available during the original program.

The recycling infrastructure comprises bin caps as shown in Figure 16, which are hired from a supply company each year. This cost is currently not passed onto event organisers as a form of incentive to event organisers to introduce Waste Wise event practices.
Other services that the costs are not passed on include waste auditing by the Council staff, a Council promotional marquee displaying sustainable practices and agency such as Water Watch information, and environmental education performers. Advice is given on Waste Wise event promotions and templates provided to enlist event traders to consider their waste and litter management practise in their operations that contribute to the success of a Waste Wise Event. This equates to approximately $1,000 per event.

Costs that are passed on include bin hire and waste and litter management services provided by the Council’s City Maintenance. This equates to approximately $3,000 per larger event such as the traditional Bayside and Williamstown community festivals.

From 2002 to 2010, the Council provided these services to Bayside and Williamstown community Festivals, the two major community events in Hobsons Bay, primarily because of the large patronage and also the type of traders and activities at each festival that produce waste, recyclables and litter.

Figures 17 and 18 shows the performance of Bayside and Williamstown waste management system from 2003 to 2009.
Both festivals show a decrease in waste generation and an increase in recycling over time, with the exception of Williamstown festival in 2009 which generate more waste than in all other years. The efforts of the event organisers are to be commended.

Increasingly as Hobsons Bay attracts more events, both major and minor and community expectation increases, the demand on Council sustainable event management services will be increased. The Council and event organisers must consider potential resources consumed and emissions generated through additional transport of source separated waste compared to the amount of recyclables likely to be generated from event activities and patrons. This will ensure that the decision to provide Waste Wise event services is provided in a sustainable way or an alternative is provided for. The Council therefore should consider developing a sustainable event guideline for its own activities and for event organisers that can be incorporated into its Special Events Package (Action Item 13.2). In developing the guidelines social, economic and environmental implications and opportunities of particular types and sizes of events should be considered to develop guiding principles where sustainable practices will be required of event organisers and where certain types of sustainable event services will or will not be provided for by the Council.

### The Council’s waste management from its facilities

The Council’s corporate waste generation and disposal accounts for 0.8 per cent of the Council’s total

Whilst a small component of total emissions when compared to emissions from its buildings, transport and street lighting, emissions from waste should remain a priority focus for the Council’s environmental activities to demonstrate leadership to staff and the community. Therefore the Council has taken steps internally to measure and reduce its own waste generation at its facilities and through its operations.

In 2007, the Council audited seven Council owned facilities and in 2011 reaudited these same facilities and Altona North Library which was constructed in 2010. Facilities audited in 2007, were:

- Hobsons Bay Civic Centre
- Altona Depot
- Altona Library
- Altona Meadows Library
- Seabrook Community Centre
- Laverton Youth Services
- South Kingsville Community Centre - the only centre audited that is Council owned but community run
Diversion results are detailed in Table 18.

<table>
<thead>
<tr>
<th>2007 Location</th>
<th>% diverted</th>
<th>2011 Location</th>
<th>% diverted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic</td>
<td>76</td>
<td>Civic</td>
<td>44</td>
</tr>
<tr>
<td>Depot</td>
<td>65</td>
<td>Depot</td>
<td>40</td>
</tr>
<tr>
<td>Laverton Youth Services</td>
<td>98</td>
<td>Laverton Youth Services</td>
<td>33</td>
</tr>
<tr>
<td>Seabrook Community Centre</td>
<td>22</td>
<td>Seabrook Community Centre</td>
<td>20</td>
</tr>
<tr>
<td>South Kingsville Community Centre</td>
<td>39</td>
<td>South Kingsville Community Centre</td>
<td>33</td>
</tr>
<tr>
<td>Altona Library</td>
<td>88</td>
<td>Altona Library</td>
<td>70</td>
</tr>
<tr>
<td>Altona Meadows Library</td>
<td>85</td>
<td>Altona Meadows Library</td>
<td>50</td>
</tr>
<tr>
<td>Altona North Library</td>
<td>Not constructed</td>
<td>Altona North Library</td>
<td>48</td>
</tr>
<tr>
<td><strong>Average diversion</strong></td>
<td><strong>67.57</strong></td>
<td><strong>Average diversion</strong></td>
<td><strong>42.25</strong></td>
</tr>
</tbody>
</table>

Table 18: diversion of waste by volume from landfill at audited Council sites. Note: In 2011, audits were conducted by visual volume based assessments and not by weight. Therefore results from the 2007 audit have been converted to litres for comparison and may not be as accurate.

The data indicates a decrease in resource recovery performance. It is important to be aware that in 2008 staff numbers at the Hobsons Bay Civic Centre increased with the move of most staff from the Council’s Williamstown office. As the nature of the work formerly conducted at the Williamstown office is similar to that of the Hobsons Bay Civic Centre the percentage diversion and resource loss is likely to have remained constant. Actions to reduce waste and increase resource recovery at the Council’s facilities are included in the recommendations section.

**Hobsons Bay Environment Action Team**

The Hobsons Bay Environment Action Team (HEAT) meets once a month. HEAT provides a forum for consultation, communication and education on environmental issues that affect and are affected by the Council’s operations. Since its inception in 2004, HEAT has met a number of litter and waste management challenges. Highlights of the Council’s waste reduction achievements to date are:

- All staff have access to recycling.
- The Altona Civic Centre has five worm farms
- All staff are encouraged to print only when necessary and to print double-sided whenever possible.
- A stationery reuse system has been put in place, including providing pre-loved binders to community groups.
• There is consistent communication of Waste Wise messages to staff, particularly through the fortnightly staff newsletter and on the internal website.
• All staff have access to printer cartridge and mobile phone recycling.
• The Council’s Environmental Purchasing Policy encourages staff to adhere to the waste hierarchy when making purchasing decisions.
• Butt bins are accessible in smoking areas.
• Mandatory design and print specifications have been introduced to reduce wastage and conserve natural resources, including all publications printed on recycled, non-chemically bleached stock using vegetable inks and minimal varnishing. Size and shape of all publications are specified to minimise wastage through cut-offs. Print run quantities are carefully considered to avoid oversupply and online accessible resources are encouraged.

Waste Wise

Waste Wise was an accreditation program run through Sustainability Victoria. Hobsons Bay City Council was Waste Wise accredited in March 2009 and recertified in 2011. HEAT develops and implements an Action Plan that ensures the Council continues to implement the Waste Wise program. Implementation enables the Council to minimise its waste and maximise the efficient use of valuable resources.

Eco-Buy and Environmental Purchasing Policy

The Council has been a member of the EcoBuy program since 2002/2003. Since joining EcoBuy, the Council has increased the amount spent on environmentally preferred products annually. The Council spent $943,964.62 on these products in the 2007/2008 financial year. In the 2010/2011 financial year the Council spent $2,619,165.52. The Council has implemented an Environmental Purchasing Policy which states that where two or more products fulfil the same purpose, the environmentally preferred product must be chosen if it is within a price premium of up to 10 per cent.

The Council’s waste management service contract specification also includes environment performance specifications and reporting requirements.

The Council also encourages materials reduction, reuse and recycling in its projects particularly in new and retrofitted Council buildings where the Council has adopted a policy for the Sustainable Design in Council Facilities that aims to achieve the following:

• Reduce the environmental impacts and operating costs of all Council-owned buildings while achieving previously adopted corporate energy and water reduction and zero net emissions by 2020 targets.
• Reduce the environmental impact of the construction and use of Council buildings by embedding sustainable design principles into existing policies and procedures and developing procedures and resources to address gaps in existing policies.

• Lead the community towards achieving zero net emissions by 2030 by providing opportunities for public engagement with and access to inspiring sustainable buildings

All new constructions, major refurbishments and extensions to Council-owned facilities must achieve the sustainable design targets.

The Council will continue to lead by example continuing the Waste Wise program or its equivalent), EcoBuy program, Environmental Purchasing policy implementation and Hobsons Bay Environment Action Team (HEAT) and encouraging materials reduction, reuse and recycling in its projects (Action Item 14)

Litter management in Hobsons Bay

Litter management services

Litter management services that the Council provide are listed in Table 19. The following table shows how each service is performing with some comparison to metropolitan Melbourne Councils. Data from 2009/2010 has been used as this is the latest Victorian data available.
### Service Summary of the Council's Recycling or disposal site

<table>
<thead>
<tr>
<th>Service</th>
<th>Annual tonnes waste collected by the Council 09/10</th>
<th>Annual cost of the Council’s service 09/10</th>
<th>Annual average of service for metropolitan councils (30) with similar services 09/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling or disposal site</td>
<td></td>
<td></td>
<td>(Source: Sustainability Victoria Local Government Annual Survey 2009-2010)</td>
</tr>
<tr>
<td><strong>Number of residential and non-residential properties</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Street Cleaning</strong></td>
<td>Street cleaning is undertaken on a scheduled basis with residential streets cleared once per month and high activity areas weekly</td>
<td>Disposed to landfill 1,405 $919,131</td>
<td>$1,274,231 Tonnages unavailable for comparison.</td>
</tr>
<tr>
<td><strong>Litter and Dumped Rubbish Removal</strong></td>
<td>Public spaces are maintained on a regular basis depending on their seasonal use. Litter is removed by manual methods. Dumped litter is removed on an at-call basis and by patrols.</td>
<td>Disposed to landfill 731 $536,446</td>
<td>Data incomplete for comparison.</td>
</tr>
<tr>
<td><strong>Litter Bin Collections</strong></td>
<td>Regular scheduled removal of litter from 650 street litter bins. The frequency of emptying litter bins depends on their location and volume of litter generated.</td>
<td>Disposed to landfill 455 $488,579</td>
<td>737 bins $362,712 994 tonnes</td>
</tr>
<tr>
<td><strong>Beach Cleaning and Seaweed Removal</strong></td>
<td>Cleaning of litter and seaweed from beaches is programmed according to tidal movements and weather conditions. Litter is removed by both mechanical and manual methods.</td>
<td>Beach cleanings disposed to landfill. From 2012 seaweed will be recycled 2,543 $150,718</td>
<td>Data unavailable for comparison.</td>
</tr>
<tr>
<td><strong>Stormwater traps</strong></td>
<td>There are 86 stormwater traps installed in Hobsons Bay; 61 side entry traps and 25 in-line traps.</td>
<td>Disposed to landfill 209.76 $29,725</td>
<td>103 side entry traps 22 in-line traps $49,416 59 tonnes</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,344 $2,124,599</td>
<td>Data incomplete for comparison</td>
<td></td>
</tr>
</tbody>
</table>

**Table 19:** Litter management services provided by the Council Sources: Hobsons Bay City Council and Sustainability Victoria *Victorian Local Government Annual Survey 2009-2010*  
Note: litter management systems differ across metropolitan Melbourne. More detail can be gathered from Sustainability Victoria’s *Victorian Local Government Annual Survey 2009-2010.*
Currently, all material collected in the street sweeping, storm water traps, dumped litter and litter bin services are land filled. Since early 2012, seaweed collected from Altona Beach by the Council has sand removed using a rotating drum cleaning machine shown in Figure 19 and the seaweed recycled into liquid fertiliser. The recycling of seaweed with save approximately $83,000 per year in disposal costs.

![Figure 19: the Trommel, a seaweed cleaning machine](image)

Street sweepings are made up of predominantly organic type waste and provide opportunity for processing into useable products rather than land filling. Waste collected from litter bins comprise recyclable product and provide opportunity for Public Place Recycling (PPR), discussed further, or recovery of resources through a suitable ARRT, rather than land filling.

Opportunities to recover resources from these sources, including current research into seaweed recycling, have been and will continue to be investigated by the Council (Action Item 4.2).

The map following shows the locations of litter traps.
Figure 20: Location of gross pollutant litter traps in Hobsons Bay.

The Local Government Community Satisfaction Survey on “Appearance of Public Areas” scored 63 in 2011, lower than the score for 2010 (67) and lower than all Councils and inner Councils. 39 per cent of respondents stated performance was good, 11 per cent stated it was excellent, 17 percent stated adequate, 22 per cent needs improvements and 11 per cent need a lot of improvement. This results in the report recommending this area as a key area of improvement and to act here first. The top three areas for improvement identified by 116 respondents, where more frequent or better street sweeping (45 per cent), better maintenance of parks and gardens (26 per cent) and more frequent or better pruning of street trees or plants (19 per cent) (Source: Local Government Community Satisfaction Survey 2011, Hobsons Bay City Council May 2011, Wallis Consulting Group, Department of Planning and Community Development).

To assess littering in Hobsons Bay and the performance of the Council’s services, the Council undertook extensive loose litter on the ground and litter bin composition audits in 2008 across the municipality. These audits, which included beach sweeping analysis, were used to determine the types of litter, disposal habits and problem areas that should form the focus of the Council’s litter reduction programs. Figure 21 shows that overall the municipality is quite tidy - more than half of the sites audited were classified as very tidy.
Based on this research the Council should continue to provide current levels of litter management services actively seeking resource recovery opportunities for recycling the litter collected including seaweed, street sweepings, stormwater traps and litter bin waste (Action Item 15).

Figure 22 shows results of loose litter audits at 261 sites showed that the most littered item was cigarette waste. High amounts of cigarette waste were recorded across the municipality in residential areas, business precincts, at the foreshore, in parks, at ports and beaches.
Dog droppings accounted for an insignificant amount of litter. Of note, from litter bin audits, numbers of dog droppings disposed appropriately averaged three per cent per bin. The greatest use of bins for dog droppings was in Williamstown, mostly along the foreshores areas.

In Hobsons Bay litter, such as glass and plastic bottles, plastic caps, straws, aluminium cans and ring pulls, comprise 11 per cent of loose litter or an average of two items per site. 50 per cent of all beverage litter was aluminium cans, caps and ring pulls with beer caps accounting for the majority of this category. 79 per cent of sites recorded between one and two pieces of plastic type litter. The highest number of drink containers in litter bins was recorded in the following areas:

- Pier Street, Altona
- GH Ransom Reserve, Altona
- Nelson Place near Commonwealth Reserve, Williamstown
- Gloucester Reserve and Williamstown Life Saving Club, Williamstown
- Loft Reserve, Newport

High levels of litter were concentrated in only a few of all the audited sites. These sites are summarised in Table 20.

<table>
<thead>
<tr>
<th>Priority litter product</th>
<th>Priority location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarette waste, Food waste, beverage type litter</td>
<td>Cherry Lake, Altona</td>
</tr>
<tr>
<td>Cigarette waste</td>
<td>Pier Street</td>
</tr>
<tr>
<td>Cigarette waste, paper</td>
<td>Aviation Road, Laverton</td>
</tr>
<tr>
<td>Cigarette waste</td>
<td>Newport Station</td>
</tr>
<tr>
<td>Cigarette waste, beverage, paper</td>
<td>Sports grounds such as Spotswood oval and Williamstown Cricket Ground</td>
</tr>
<tr>
<td>Cigarette waste</td>
<td>Point Gellibrand</td>
</tr>
<tr>
<td>Cigarette waste</td>
<td>Williamstown Foreshore including Hatt Reserve</td>
</tr>
<tr>
<td>Cigarette waste</td>
<td>The Strand</td>
</tr>
<tr>
<td>Cigarette waste, Paper</td>
<td>Ferguson Street</td>
</tr>
</tbody>
</table>

Table 20: 2008 Litter audit data – loose litter on the ground by type and locations (Source: Municipal Litter Audits in Hobsons Bay, 2008)
During the 2008 litter and bin audits paper was second only to cigarette waste in both loose litter and litter bin audits. 16 per cent of all recorded litter on the ground was paper (Figure 22). Paper comprising mostly tickets and receipts, accounted for 30 per cent of all rubbish recorded in litter bins (Figure 23). Cardboard boxes, newspapers and advertising material made up 23 per cent of the paper items disposed in litter bins. Figure 23 shows a further breakdown.

![Figure 23: Breakdown of bin litter by category disposed in litter bins, number of items by category (Source: Municipal Litter Audits in Hobsons Bay, 2008)](image)

Most suburbs within Hobsons Bay reflected the littering and litter disposal trends of the wider municipality. However two suburbs showed trends different to those shown overall. Altona had a high number of cigarette butts (65 per cent of all litter) in litter bins and 40 per cent was found as litter on the ground. This is significantly less than the municipal wide average (59 per cent) suggesting a high level of bin use. Spotswood also showed different littering behaviours than those demonstrated at a municipal level, with the majority of the suburb’s litter comprising plastic and beverage waste.

Most litter bins (83 per cent) were less than 60 per cent full. 48 per cent of all bins were less than 20 per cent full. Only nine litter bins across the municipality were over filled and these were located in Ferguson Street and Douglas Parade, Williamstown and along the Williamstown foreshore near Point Gellibrand. The provision of bins seemed to bear no relationship to the general tidiness of the municipality or the results of the loose litter audits. For example, most of the bins in Cherry Lake were less than 20 per cent full despite extensive loose litter. This is important when considering infrastructure solutions to litter problems, as the access to bins may have no effect on littering behaviours. It is important to consider all three elements of good litter management – infrastructure, education and enforcement – when creating litter management solutions.

Another type of litter specific to the litter management challenges of Hobsons Bay is waste associated with fishing, such as line, hooks and other discarded fishing equipment. Although unaccounted for in the
litter audits fishing line, hooks, plastic bags, bait containers and bait bags are prolific in some popular fishing spots like the Warmies on the Strand in Williamstown. The Council is partially through a project at the Warmies that aims to reduce littering by improving infrastructure related to littering such as signage and bins and implementing a community behaviour change and enforcement program.

During the 2008 audit, beach litter was also counted by reviewing litter collected during mechanical beach cleaning undertaken by the Council. The following sites were analysed at each beach and are mapped in Figure 24:

- Altona 1 – to the west of Altona Pier for approximately 130 metres.
- Altona 2 – to the east of Altona Pier commencing at Sargood Street, approximately 200 metres towards the east.
- All of Williamstown beach with zone 1 being the perimeter, zone 2 being the middle perimeter and zone 3 being the centre.

Figure 24: map of beach litter sweepings of which beach litter audits were based on (Source: Municipal Litter Audits in Hobsons Bay, 2008)
Figure 25 shows the majority of litter collected from all beach sweepings was cigarette litter which includes, matches, packaging, litters and butts accounting of 52 per cent of litter items.

![Pie chart showing percent of litter items on beaches](image)

Figure 25: Percentage of litter items on beaches, number of items by category (Source: *Municipal Litter Audits in Hobsons Bay, 2008*)

At Altona Beach, cigarette butt litter and plastic were the highest littered items accounting for 32 and 30 per cent respectively. There was a higher occurrence of littering closer to the Altona Pier. In Williamstown cigarette butt litter accounted for 53 per cent of littered items with an approximately equal proportion across the outer, middle and inner zones.

Based on the research, the Council should continue to develop and implement targeted anti littering campaigns such as cigarette butt and fishing litter. Evaluation should also be incorporated into each program. More in depth litter bin and behavioural audits such as that completed in 2008, should also be considered to evaluate the Plan’s effectiveness and establish future priorities.

**Community Local Laws: litter management**

The Council’s Community Local Law (Local Law) addresses the following litter management and related issues:

- For building sites the appropriate management and containment of waste, prevention of litter and stormwater is required under the Local Law. The Local Law also aims to protect Council road assets including vehicle crossings and kerb and channels (Clause 76 and 135).

- Clothing charity bins are provided for residents to deposit much needed clothing for the less fortunate and has a role in reducing waste to land filling through reuse. Often donations are dumped next to charity bins because the items cannot fit in the bin or the bin is full. The Local Law provides conditions for the placement and management of clothing charity bins (Clause 47).
These conditions aim to ensure litter is minimised and donations are available for reuse.

- Unsightly properties can lead to detrimental effect on the neighbourhood and can influence littering behaviours. The Local Law provides conditions for ensuring private property maintenance (Clause 38).

- Advertising, bill posting and junk mail can lead to litter, influence littering behaviours and contribute to unwanted waste. The Local Law provides conditions to prohibit advertising and bill posting on the Council’s land or land that it is control of, or on any property owned or controlled by any statutory or government authority. The Local Law also prohibits advertising material from being distributed to any property in the municipality that displays a ‘no advertising’ sticker or similar (Clause 44).

- The Local Law provides conditions for the prevention of animal excrement being left in public places. The Local Law prohibits a person in charge of an animal must not allow excrement to remain on public land, immediately collect it and carry a litter bag (Clause 59). The Council provides litter bags in a number of public spaces for this purpose and pouches to attach to dog leads to carry litter bags.

- Shopping trolleys abandonment is controlled in clause 96 and 97 of the Local Law through conditions aimed at individuals and shopping trolley owners and allows for impoundment (Clause 96 and 97).

- Footpath trading particularly outdoor eating facilities are controlled by the Local Law which references the Footpath Trading Code of Practice (the Code) (Clause 116). The Local Law requires a permit and compliance with the Code. The Code requires permit holders to provide wind proof ashtrays for patrons at all times, to regularly remove all cigarette butts and dispose of them in the bins kept inside the premises and to maintain clean footpaths and not sweep litter into gutters.

(Source: Hobsons Bay City Council, Community Local Law, effective 1st April 2011)

Graffiti also contributes to littering behaviours as it diminishes the image of the municipality to residents and visitors. The Council’s Graffiti Management Policy provides procedural guidelines for the management and removal of graffiti on private and public assets and support for legal and approved community arts projects (Source: Hobsons Bay City Council, Graffiti Management Policy 21st September 2010).

These local laws are used by the Council in circumstances where non-compliance is an ongoing issue and where proof of responsibility for the act of littering can be obtained. The Council should continue utilising the local laws in this way and seek to improve and refine them and internal processes at the time of the local law review (Action Item 16).
Public Place Recycling

The Council has trialled a Public Place Recycling (PPR) program in the Altona and Williamstown shopping precincts in 2007. Public Place Recycling (PPR) is a materials recovery system designed to collect materials from the waste stream for recycling in high-use public areas such as parks, shopping centres, tourism areas, transport hubs and sporting and entertainment venues. The system is provided with litter bins.

The Council’s trial in 2007 at Altona and Williamstown beaches, did not meet expected performance measures. Table 22 shows the expected and actual performance of the trials at the two beaches.

Types of litter that are recycled in public spaces elsewhere include aluminium cans, glass bottles and jars, plastic bottles and cups and tetra boxes. Paper and cardboard, while recyclable are often over contaminated in a public place recycling system with food waste. Based on other Council’s experiences paper and cardboard was excluded from the Council’s public place recycling system because of high food waste contaminating the recycling stream. Figure 23 illustrated earlier shows the number of recyclables contained in 298 litter bins across the municipality during litter bin audits in 2008. Beverage containers comprised 12 per cent of the number of items disposed in litter bins.

<table>
<thead>
<tr>
<th>Performance measure (four PPR stations)</th>
<th>Estimated performance</th>
<th>Actual trial performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial length</td>
<td>August 2007 to April 2008</td>
<td>August 2007 to April 2008</td>
</tr>
<tr>
<td>Kilograms recyclable</td>
<td>2300 kilograms</td>
<td>190 kilograms</td>
</tr>
<tr>
<td>Contamination rate</td>
<td>Less than 10%</td>
<td>11% (unable to be recycled and therefore land filled)</td>
</tr>
<tr>
<td>Average per cent bin fullness per week</td>
<td>75 per cent</td>
<td>46 per cent</td>
</tr>
<tr>
<td>Annual cost (includes labour, vehicle, signage, landfill and recycling costs)</td>
<td>$3,392</td>
<td>$3,367</td>
</tr>
<tr>
<td>Cost per tonne of recyclable potential (excluding signage)</td>
<td>$920</td>
<td>$11,000</td>
</tr>
<tr>
<td>Contaminating products</td>
<td>Plastic bags, polystyrene, rubbish, food</td>
<td>Plastic bags, polystyrene, cardboard, paper, waxed or lined cups</td>
</tr>
<tr>
<td>Green house gas saving CO2 equivalents (tonnes)*</td>
<td>41.56</td>
<td>0 (3.43**)</td>
</tr>
<tr>
<td>Energy savings (kWh)*</td>
<td>198,950</td>
<td>0 (16,435**)</td>
</tr>
<tr>
<td>Water savings (tonnes)*</td>
<td>513</td>
<td>0 (43**)</td>
</tr>
<tr>
<td>Trees saved (number)***</td>
<td>0.250</td>
<td>0 (0.02**)</td>
</tr>
<tr>
<td>Green house gas contribution CO2 equivalents (tonnes)****</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Table 22: Public Place Recycling trial data
The high contamination rate and limited recovery of materials led to the 2007 trial being unsuccessful, costly and limited in environmental benefit. A further trial has been conducted in 2010 in shopping centres. The Council should review this trial and consider whether public place recycling continues or if there are other future opportunities such as ARRT that will divert recyclables and food waste from the litter bin service (Action Item 18 and 4.2)

**Community engagement and education: litter**

The Council has a responsibility to ensure its community is well informed and is provided with opportunities to reduce litter, recycle and take responsibility for managing its own waste and litter. The Council has provided, or is currently providing, the following litter related community education and engagement programs, events and initiatives:

- **Warmies Litter Prevention Program** - a partnership program led by the Council, with a range of land managers, local businesses, recreational fishing bodies and community organisations, including Friends of Greenwich Bay, Department of Primary Industries (Fisheries Victoria), Parks Victoria, Friends of Greenwich Bay, BADGAR Wildlife Rescue, Fishcare, Ecogen Energy, Victorian Recreational Fishing and Port of Melbourne Corporation. The program aims to raise the profile of the area near Newport Power Station and the ‘Spit’ as a valued recreational space and build a sense of respect and care for it by including community engagement and enforcement activities and improving infrastructure. Community engagement activities have been the main activity of the Council and stakeholders. Litter bin and signage infrastructure audits have been completed. There are a suitable number of litter bins in the area however litter signage needs to be updated. The Port of Melbourne Authority (PoMC) will be commencing implementation of a Port Interface Landscape Masterplan plan which will build a shared port and community vision for the open spaces managed by PoMC in Williamstown, Newport, Spotswood, Yarraville, Footscray, West Melbourne, Docklands and South Wharf. The Masterplan provides for improved landscaping and access to the Warmies area and litter bins. Observations by the Council’s litter collection crews suggest that littering has reduced. Due to the PoMC works and observations the program will need review

- **Clean Up Australia Day** – In partnership with Clean Up Australia Ltd, on an annual basis the Council host one Clean Up Australia Day site in a local reserve or park, and supports community groups to organise their own community Clean Up Australia Day sites. This support is through promotion, provision of materials and equipment and hosting a barbeque for all volunteers. The Council should consider this annual Clean Up Australia Day Program.

- **Summer Litter Blitz** – a communication and education campaign delivered at Williamstown and Altona beaches during summer to raise awareness of littering issues and encourage a move
towards positive littering behaviour and attitudes.

The Council should continue to provide community engagement and education on litter minimisation initiatives particularly Clean Up Australia Day and campaigns targeting cigarette butt litter (Action Item 17.1 and 17.2). The Council should review the Warmies project (Action Item 17.3).

Behavioural change programs will be developed to address the above issues and consideration will be given to any highlighted in the development of the Environmental Engagement Strategy.

**Funding the Plan**

The Plan will be funded through the Council’s Environmental Management budget, predominantly made up of waste service charges and some contract income. The Waste Service Charge primarily funds household waste, garden waste, recycling and hard waste collections and disposal and processing services. This includes the management of these services. General rates fund litter bin and dumped litter collections, litter traps, street sweeping, beach cleaning.

The Council’s Recyclables Contract began on 6th June 2011 accruing an annual income of approximately $500,000 per year. This will fluctuate according to amount of recyclables collected. The contracted rate is a set for the initial contract term and does not fluctuate with market changes or CPI. The contract also makes an allowance of $50,000 per year for recycling education programs. This is the first time that the Council has opportunity to raise income from waste contracts due to strong competition among the Materials Recycling Facility (MRF) operators and healthy commodity prices.

The Council has identified opportunity in this income and financial saving to resolve resource deficiencies that could enable the Council to move beyond “business as usual”, continuously improve the municipal waste service, research and implement new initiatives, and plan for future waste service cost implications.

To implement the proposed activities and address possible future implications it is proposed that the Recyclables Contract income be utilised to fund initiatives, programs and research identified in the Plan (Action Item 19.1).

The Plan also identifies future challenges in waste management that could have significant cost implications to the Council. A financial reserve (‘sinking fund’) is proposed whereby part of the recyclables contract income is set aside each year to address future waste management challenges (Action Item 19.2).

External funding will sought as this becomes available to assist in the delivery of actions and directions
identified in the Plan. These funding sources include but are not limited to the Metropolitan Waste Management Group, Sustainability Victoria and Environment Protection Authority Victoria.

As the Recyclables Contract Income will fluctuate at the end of each financial year any remaining funds from this source will be invested back into this sinking fund (Action Item 19.3).

Funds from the Recyclables Contract Income remaining at the end of each financial year will be invested into the financial reserve (sinking fund) for future allocation to waste management costs (Action Item 19.3).

**Evaluation and Reporting on the Plan**

The Plan’s term is July 2012 to June 2017. Reporting on the Plan will be on an annual basis and an action plan will developed each year for the forthcoming financial year and approved by the Council’s Corporate Management Team.

The Plan will be reviewed at the end of its five year term and a new plan for the next five years developed.

As previously discussed at the time of the Plan’s development, National, State and Metropolitan policy directions continue to be reviewed, legislation developed and programs implemented. These will inform local government responses to waste and litter management. As policy, legislation and programs are implemented at National, State and Metropolitan levels that have significant impact on or opportunity for the Council and its community, they will be assessed by the Council and a response sought through the Council’s reporting cycle. This will ensure that the Council is responsive and the Plan’s is flexible to the needs at the time.

There are many actions identified in the Plan, and the Council will need to plan activities over the next five years taking into consideration financial and personnel resources available. The Council will therefore develop an annual action plan that is achievable and realistic and takes into account short and long term priorities (Action Item 20).
Summary of actions

The following is a summary of actions within the Council’s area of influence, in the municipal waste and litter sector, that are identified throughout the Plan as “Action Items” and with the following symbol:

The actions are not listed accordingly to priority, nor have been timetabled within the next five years. The Council will assess personnel and financial resources to achieve the actions and develop an annual action plan that is achievable and realistic.

<table>
<thead>
<tr>
<th>Action number</th>
<th>Action description</th>
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<tr>
<td>1</td>
<td><strong>Australian Government - Product Stewardship Bill 2011/Electronic Waste</strong> - Develop a business case for an electronic waste recycling service based on a trial/pilot, benchmarking and other research for consideration and future implementation. Advocate for the development of an e-waste facility in Melbourne’s west, that is conveniently located for Hobsons Bay residents</td>
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<td>2</td>
<td><strong>Victorian Government – Environment Protection Authority – Landfill Levy</strong> - The Council should advocate, independently or collectively with other Councils, to the State Government and Metropolitan Waste Management Group (MWMG) to invest in resource recovery providing funding from the landfill levy and review the landfill levy to ensure the carbon costs of waste are not double counted in the Carbon Price.</td>
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<td>3.1</td>
<td>The Council should advocate to the State Government and MWMG to undertake bin composition audits at Victorian and metropolitan level and consider its own auditing of local activities.</td>
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<td>3.2</td>
<td>Actively contribute to the review and development of the Victorian Waste Policy.</td>
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<td>3.3</td>
<td>Review new targets and strategies established under the Victorian Waste Policy and consider their adoption.</td>
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<td>4</td>
<td><strong>Victorian Government - Sustainability Victoria/Metropolitan Waste Management Group</strong></td>
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<td>4.1</td>
<td>Victorian Advanced Resource Recovery Initiative (VARRI) – advocate to the MWMG and State Government for further research into Alternative Resource Recovery Technologies be conducted by the State, to enable effective long term planning and localised collection service reviews that accommodate future waste technology advances. Alternatively the Council should seek to collaborate with other councils on similar research.</td>
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<td>4.2</td>
<td>Develop options and consider implications for food waste recovery from the garbage stream, public place recycling from litter bins, seaweed, street sweepings and stormwater.</td>
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<td>5</td>
<td><strong>Victorian Government - Sustainability Victoria - Detox your home</strong> - Actively seek to establish a permanent ‘Detox Your Home’ facility within the bounds of the municipality, a more regular mobile service or partnership with a local chemical recycling company.</td>
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<td>6</td>
<td><strong>Metropolitan Waste Management Group (MWMG)</strong></td>
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<td>6.1</td>
<td>The Council will actively encourage the MWMG to plan for more facilities to process garden waste with options for food waste, seaweed and street sweepings.</td>
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<td>6.2</td>
<td>Continue to actively participate in the MWMG Local Government Forum and Local Government Waste Education Network, represent Local Government and the Council on the Technical Advisory Reference Group (TARG) for a two year membership term.</td>
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<td>7</td>
<td><strong>MWMG Regional tenders and contract</strong> - The Council will locally implement the regional North West Organics Processing and Landfill service contracts, including actively participating in regional user group activities.</td>
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<td>8</td>
<td><strong>The Council’s Waste Management Service</strong></td>
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<td>8.1</td>
<td>Until technology becomes available and research concludes best practice approach to municipal waste services, the Council should continue to provide weekly 120 Litre garbage, fortnightly 240 Litre recycling and fortnightly 120 or 240 Litre garden waste collections, looking for service improvements in each new tender. Including options for tenderers to provide proposals for food waste collections and services to commercial properties and multi unit developments.</td>
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<tr>
<td>8.2</td>
<td>Continue to provide an annual booked hard waste collection service available to households once per financial year and continue to review reuse and recycling opportunities during each retender.</td>
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</table>
8.3 The Council should with State, MWMG and other Councils develop waste avoidance programs targeting municipal waste.

8.4 Bin colour standardisation – assess future guidelines or standards and their application and impact to the Council.

8.5 The Council should work with the MWMG and service providers, to reduce contamination in recycling and garden waste collections developing a community education and enforcement program.

8.6 Continue to undertake audits of recyclables collected in vehicles and seek to undertake audits for garden waste and garbage collection vehicles.

9 The Council’s Waste Management Service Community Local Law - Continue and enforce waste service related enforcement. Seek to improve and refine these local laws and internal processes as part of any local law review.

10 The Council’s Waste Management Service to non residential properties and multi unit developments.

10.1 Continue to provide municipal waste service to community facilities such as aged and child care, schools, churches, community centres and recreational centres. Establish with greater accuracy the number of services provided to community facilities and review types of services to these facilities. Develop a waste services policy that reflects review findings.

10.2 Consider altering the day of collection of commercial cardboard to a weekday, consulting service users prior to implementation. Establish with greater accuracy the number of services provided to commercial properties. Investigate alternate municipal waste service for commercial properties (existing and potential). Research and develop Options and Issues Paper including a waste charge scheme specific to this service. Scope the project including consultation with existing municipal waste service users and undertaking possible trials.

10.3 Investigate alternate municipal waste services for multiunit developments (existing and potential), including a waste charge scheme specific to this service. Develop clearer Council policy and guidelines to demonstrate its needs to the development community.

11 The Council’s Waste Management Service Waste reduction and resource recovery
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